## **COLOMBIA**

# HIGHWAY DEVELOPMENT AND INSTITUTIONAL STRENGTHENING PROGRAM FOR CUNDINAMARCA

(CO-0264)

#### LOAN PROPOSAL

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Annex III Map showing location of highway construction works

### BASIC SOCIOECONOMIC DATA

For basic socioeconomic data, including public debt information, please refer to the following address:

### **English:**

http://www.iadb.org/RES/index.cfm?/fuseaction=externalinks.countrydata

## **Spanish:**

http://www.iadb.org/res/index.cfm?/fuseaction=externalinks.countrydata

#### **ABBREVIATIONS**

AWP Annual Work Plan

CAP Centro Administrativo Provincial [Provincial Administration Center]
CGr Contraloría General de la República [Controller General's Office]
CONPES Consejo Nacional de Política Económica y Social [Social and Economic

Policy Council

DAF Dirección de Apoyo Fiscal [Fiscal Support Division (Ministry of Finance)]

DAPC Departamento Administrativo de Planeación de Cundinamarca

[Cundinamarca's Administrative Planning Department]

DNP Departamento Nacional de Planeación [National Planning Department]

EIA Environmental Impact Assessment

FOSIT Programa para el Fortalecimiento del Sistema de Información Financiera

Territorial [Program to strengthen local financial information systems]

GIS Geographic Information System HDM-IV Highway Design Management

INVIAS Instituto Nacional de Vías [National Highway Authority]
MHyCP Ministerio de Hacienda y Crédito Público [Ministry of Finance]

OCI Oficina de Control Interno [Office of Internal Audits]

PCU Program Coordinating Unit

PDD Plan de Desarrollo Departamental [Departmental Development Plan]
PMA Plan de Manejo Ambiental [Environmental Management Plan]
POT Plan de Ordenamiento Territorial [Local management plan]

ROS Regional Operations Support Office (IDB)

SAMR Sistema de Administración y Evaluación de Mantenimiento Rutinario

[Administration and evaluation system for routine highway maintenance]

SCI Sistema de Control Interno [Internal Audit System]

SECI Sistema de Evaluación de la Capacidad Institucional [System for

evaluating institutional capacity]

SGFT Sistema de Gestión Financiero Territorial [District Financial Management]

System]

SGP Sistema General de Participaciones [General System for Transfers]

SHD Secretaría de Hacienda Departamental [Departmental Finance Secretariat]
SIDEP Sistema de Información Departamental [Department Information System]
SIF Sistema Integrado de Administración Financiera [Integrated Financial

Administration System]

SOP Secretaría de Obras Públicas [Public Works Secretariat]

SUPERCADES Centro de Atención Distrital Especializado [Special Public Service Centers

for the Federal District]

UBN Unmet basic needs



## **COLOMBIA**

IDB LOANS
APPROVED AS OF SEPTEMBER 30, 2002

	US\$Thousand	Percent
TOTAL APPROVED	8,721,396	
DISBURSED	7,738,489	88.7%
UNDISBURSED BALANCE	982,907	11.3%
CANCELLATIONS	917,815	10.5%
PRINCIPAL COLLECTED	3,920,275	45.0%
APPROVED BY FUND		
ORDINARY CAPITAL	7,905,625	90.6%
FUND FOR SPECIAL OPERATIONS	755,535	8.7%
OTHER FUNDS	60,236	0.7%
OUSTANDING DEBT BALANCE	3,818,214	
ORDINARY CAPITAL	3,608,515	94.5%
FUND FOR SPECIAL OPERATIONS	209,433	5.5%
OTHER FUNDS	265	0.0%
APPROVED BY SECTOR		
AGRICULTURE AND FISHERY	553,297	6.3%
INDUSTRY, TOURISM, SCIENCE TECHNOLOGY	502,163	5.8%
ENERGY	2,647,097	30.4%
TRANSPORTATION AND COMMUNICATIONS	678,791	7.8%
EDUCATION	85,336	1.0%
HEALTH AND SANITATION	742,854	8.5%
ENVIRONMENT	129,847	1.5%
URBAN DEVELOPMENT	399,018	4.6%
SOCIAL INVESTMENT AND MICROENTERPRISE	1,089,967	12.5%
REFORM PUBLIC SECTOR MODERNIZATION	1,858,668	21.3%
EXPORT FINANCING	0	0.0%
PREINVESTMENT AND OTHER	34,358	0.4%

<sup>\*</sup> Net of cancellations with monetary adjustments and export financing loan collecti



## Colombia

## **Tentative Lending Program**

2002			
Project Number	Project Name	IDB US\$ Millions	Status
CO0251	Bogota District Institutional Strengthening	16.0	APPROVED
CO0234	Social Infraestructure and Management Community for Peace	63.0	APPROVED
*CO0260	Colpatria Mortgage Bond	5.2	
CO0264	Department of Cundinamarca's Highway and Institutional Strengthening Prog.	21.7	
	Total - A : 4 Projects	105.9	
	TOTAL 2002 : 4 Projects	105.9	
2003			
Project Number	Project Name	IDB US\$ Millions	Status
CO0241	Social Housing Program	100.0	
CO0139	Health Services Networks Modern. Prog.	100.0	
CO0258	Attorney General's Office Support & Strengthening	18.0	
CO0262	National Environmental System Support Program	35.0	
CO0265	Fiscal Sustainibility	400.0	
	Total - A : 5 Projects	653.0	
CO0263	Infrastructure Privatization and Concessions II	21.0	
CO0250	National Water Plan	60.0	
*CO0259	Electrocaribe/Electrocosta	22.5	
	Total - B : 3 Projects	103.5	
	TOTAL - 2003 : 8 Projects	756.5	
	Total Private Sector 2002 - 2003	27.7	
	Total Regular Program 2002 - 2003	834.7	

<sup>\*</sup> Private Sector Project

## **COLOMBIA**

## STATUS OF LOANS IN EXECUTION AS OF SEPTEMBER 30, 2002

(Amounts in US\$ thousands)

APPROVAL PERIOD	NUMBER OF PROJECTS	AMOUNT APPROVED	AMOUNT DISBURSED	% DISBURSED
Before 1996	10	620,793	558,033	89.89%
1996 - 1997	8	243,864	168,247	68.99%
1998 - 1999	7	141,900	34,499	24.31%
2000 - 2001	5	1,093,000	435,286	39.82%
2002	2	79,000	500	0.63%
TOTAL	32	\$2,178,557	\$1,196,565	54.92%

<sup>\*</sup> Net of Cancellations . Excluding export financing loans.

# HIGHWAY DEVELOPMENT AND INSTITUTIONAL STRENGTHENING PROGRAM FOR CUNDINAMARCA

(CO-0264)

#### **EXECUTIVE SUMMARY**

**Borrower:** Department of Cundinamarca

**Guarantor:** Republic of Colombia

Executing agency:

Departmental Government of Cundinamarca

**Amount and** IDB (OC): US\$21.7 million source: US\$ 9.3 million

Total: US\$31.0 million

Financial terms Amortization period: 20 years and conditions: Grace period: 4 ½ years

Disbursement period:  $4 \frac{1}{2}$  years Interest rate: variable Inspection and supervision: 1% Credit fee: 0.75%

Currency: United States dollars from the Single

**Currency Facility** 

Objectives: This program seeks to facilitate regional development and

accessibility by improving the system of roads and strengthening the

departmental government's management capacity.

Its specific objectives in the highway sector are to: (i) upgrade the system of secondary roads, increasing regional interconnectivity and reducing transportation costs, (ii) enhance the performance of highway maintenance services, and (iii) improve administration of the highway system. And, in the area of institutional strengthening, to: (i) reinforce the systems for planning, monitoring and evaluating management performance, including implementation of the District Financial Management System (SGFT) and the Departmental Information System (SIDEP); (ii) create a system to manage the department's documents, while strengthening performance evaluation and internal audit systems; and (iii) provide technical assistance to

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municipalities in the areas of administration, fiscal and financial management and land-use planning.

#### **Description:**

The program will consist of two subprograms, one to improve the road system and the other to provide institutional strengthening, the two linked by a common goal: that of paving the way for implementation of the Departamental Development Program.

The highway subprogram will be made up of three components:

Funding for highway improvement. Projects to be carried out include upgrading, paving and rehabilitation of existing highways (240 km). These works will complete the development of two ring road systems (one internal and one external) and seven regional trunk lines: (i) the internal beltway that circumscribes the district capital and permits traffic to bypass urban areas; (ii) the external ring road system connecting border regions of the department; and (iii) the system of trunk lines intersecting with the two ring road systems to ensure interconnectivity among the regions and guaranteeing the flow of good between the department and other parts of the country and the capital.

**Maintenance administration system.** Resources will be provided for development and implementation of an administration and evaluation system for routine highway maintenance (SAMR) to improve the scheduling of activities, contracting, and supervision.

**Institutional strengthening for the SOP.** The Public Works Secretariat (SOP) will be strengthened to add technical capacity and enhance its effectiveness as the planning and oversight body for the secondary road system, at the same time developing its ability to provide municipalities with the technical assistance and institutional support needed for better management of the road systems for which they are responsible.

The institutional strengthening subprogram will consist of three components:

Reinforcement of planning, financial administration and information systems. This component will enhance activities in the areas of planning, supervision and evaluation of management and performance; permit consolidation of financial administration; strengthen oversight and collection of departmental revenues; and help create the Departmental Information System (SIDEP).

**Strengthening management support systems.** This component will include four management support systems: (i) managing the department's documents; (ii) updating and valuation of inventories of

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real property; (iii) planning, measurement of results and evaluation of performance by personnel; and (iv) internal auditing.

Technical assistance for municipalities in fiscal and financial management and land-use planning. This component will support modernization of the Provincial Administration Centers (CAPs); provide administrative, fiscal and financial assistance for the municipalities; and improve procedures for local and regional land-use planning.

The Bank's country and sector strategy:

The Bank's strategy for Colombia focuses on five high-priority areas: (i) support for the peace process; (ii) reduction of poverty and inequalities; (iii) consolidating progress in the decentralization process; (iv) modernization of the State; and (v) achieving sustainable growth. By supporting development of regional infrastructure and providing institutional strengthening, this operation will contribute directly to the attainment of objectives (iii), (iv) and (v). Improvement of the highway system will lower shipping costs, thus improving productivity, making the region's products more competitive, and helping to ensure sustainable growth. The operation will also make it easier to work in close coordination at all levels of government, encouraging greater decentralization.

Coordination with other official development institutions:

The Department of Cundinamarca is also negotiating an education loan for US\$15 million with the World Bank. The World Bank and the IDB have worked closely together in preparing the two operations, coordinating their activities, particularly in areas concerned with institutional strengthening (see paragraph 1.46).

Environmental and social review:

The project report was reviewed and approved by the Committee on Environment and Social Impact (CESI) on 18 October 2002.

The program is expected to produce many, widely distributed and favorable socioenvironmental benefits, which will be seen primarily in the economy and quality of life of persons living in the target areas.

Potentially adverse social and environmental effects can be described as small to moderate in magnitude, readily identifiable, limited to the area directly affected by the works, of short duration and preventable or controllable by taking appropriate steps. (See paragraph 4.22)

**Benefits:** 

The physical and operational improvements made to highways in the target area and their associated infrastructure will reduce transport time and shipping costs, and improve quality of life for the people that rely on this system, primarily by ensuring greater accessibility to basic services such as health care, education and public security.

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The program will enhance the SOP's ability to manage the highway system, helping it to adopt more effective policies and make better use of its resources. The introduction of a system for the administration of routine maintenance services will enable the Secretariat to improve its efficiency.

Strengthening planning and financial administration systems will ensure more efficient, effective and transparent management. The improvement in management support systems will bolster the department's finances and permit assessment of staff performance resulting in higher productivity. Meanwhile, reinforcement of the internal auditing system will ensure greater transparency in the administration of each institution's resources.

The technical assistance provided will enhance the planning and management capacity of selected municipalities in technical, administrative and financial areas, thus enabling them to make more efficient and effective use of their resources.

**Risks:** 

The short term of office served by the departmental government could result in the loss of political support for continuation of the program. The resources of both the highway development and the institutional strengthening subprogram will finance activities that have received high priority from the department government in the effort to achieve an efficient public administration. High-priority activities such as these tend to transcend changes in administration and therefore should mitigate this risk .

In carrying out highway works projects there is also a risk that difficulties affecting the execution and supervision of such works may arise due to the armed conflict taking place in Colombia. This risk is low in the present case, however, since the majority of the works projects will be carried out in relatively safe zones with a lower incidence of violence.

In the institutional strengthening activities for the departmental government, some resistance to the reorganization of procedures could be encountered due to reluctance on the part of staff to change routine processes that have been carried out in a given way for many years. Resources have been allocated for training and promotional measures designed to prepare personnel for these changes.

Special contractual clauses:

Prior to the first disbursement, the departmental government must submit to the Bank evidence of the: (i) creation of the Program Coordinating Unit (PCU); (ii) hiring of the coordinator of the PCU, and selection of the minimum number of personnel necessary for its operation; (iii) opening of a special account for handling of the Bank's

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resources; and (iv) approval by the Bank of the definitive AWPs for the first year of execution (see paragraph 3.11).

Povertytargeting and social sector classification: This operation does not qualify as a social equity enhancing project, as described in the indicative targets mandated by the Bank's Eighth Replenishment (Document AB-1704).

Exceptions to Bank policy:

No exceptions from the Bank's policies are requested.

**Procurement:** 

The procurement thresholds for requiring international competitive bidding under this program are: US\$350,000 for goods and related services; US\$200,000 for consulting services; and US\$5 million for construction works. These thresholds are justified on the basis of the fact that in similar projects carried out in Colombia, only external bidders submit proposals on amounts above these figures.

#### I. FRAME OF REFERENCE

#### A. Subnational divisions

- 1.1 Colombia is a unitary republic made up of departments, districts, municipalities and indigenous territories. These local administrations enjoy full autonomy in the management of their own interests and have the right to: (i) be governed by their own authorities; (ii) administer their resources and establish such levies as they deem necessary; and (iii) share in national revenues.
- 1.2 The country has 32 departments, each with a separate governor and departmental assembly. Finally, Colombia has a total of 1097 municipalities, which are the basic politico-administrative divisions of the State. Each municipality is headed by a mayor and a municipal council.

Areas of responsibility at each level of administration

The state of the s				
National	Departmental	Municipal		
Formulate development policies and objectives; allocate the proceeds of transfers to local administrations; give advice on financial matters; set standards for provision of services; monitor and evaluate compliance with policies and distribution of resources.	Plan and promote economic and social development, as well as fostering basic services within its jurisdiction.  Coordinate and enhance municipal actions by advising and providing technical, administrative and financial support in the execution of social spending.  Administer transferred resources; and evaluate and oversee investment and development plans for municipalities.	Carry out social policy in the four basic areas of education, health, water supply and sanitation.  Regularize land development and promote community participation.		

#### B. The Department of Cundinamarca

- 1.3 The Department of Cundinamarca is located in the geographic center of Colombia, surrounding the Capital District of Bogotá. It has a population of 2.2 million spread over some 22,600 km², and is divided into 116 municipalities which are grouped into 15 different regions or provinces. Roughly 30% of its inhabitants are concentrated in 4 cities, whereas the rest are spread throughout a large number of municipalities located primarily (90%) in rural areas. Of these, 70% have a population of less than 15,000, while the remaining 20% have fewer than 5,000 inhabitants.
- 1.4 Cundinamarca has one of the country's most important departmental economies. Not including Bogotá's contribution, the department's production figures for the year 2000 represented close to 8% of national GDP, making it the third highest producer among Colombia's 32 departments, after Antioquía and Valle. This is due in part to rapid growth in the export sector which accounted for 17% of Colombia's total exports in 2001.

- 1.5 Social conditions in the department have worsened in recent years. Over the period 1997-2000, the percentage of the department's population with unmet basic needs rose from 21.8% to 23.4%, approximating the national average. This development is due in large part to the fact that Cundinamarca has received a major influx of displaced persons fleeing the violence and civil strife afflicting the country.
- 1.6 The civil unrest seen elsewhere is noticeably less pronounced in what has been termed the central zone (in which Cundinamarca is located), compared to the northeastern, northern and southwestern regions of the country. National statistics for last 10 years show that Cundinamarca has the fourth fewest kidnappings among Colombia's departments. Of the 116 municipalities that make up the department, only 8—most of which are in the southern zone—have a rate of violence classified in the high (2) or medium (6) range. The other 108 municipalities are split evenly between those with a low rate of violence (54), and those with no violence (54).
- 1.7 Finally, over 100 of these municipalities are classified as category 5 or 6 areas, which means that they are relatively small districts with few disposable resources. Table I-1 shows this classification for the department.

Table I-1. Category distribution of Cundinamarca's municipalities

Category <sup>2</sup>	N° of Municipalities	% of Population
2 and 3	5	27
4	10	21
5 and 6	101	52

#### C. The highway sector

1.8 Population movement and the location of human settlements are closely related to Cundinamarca's highway system which converges on Bogotá and provides vital potential in the form of access to Colombia's principal consumer center, as well as linking the department to the rest of the country.

Municipalities are classified by the DNP based on the average number of attacks in the last four years: municipalities with more than eight attacks are deemed to have a high rate of violence; those with four to seven are rated medium; those with one to three are classified as low; and those with none at all are said to have no violence.

The category is determined by total population plus disposable income within each municipality: category 2 means between 50,000 and 100,000 inhabitants with income equivalent to 50,000 to 100,000 times the minimum wage; category 3 means 30,000 to 50,000 inhabitants with income of 30,000 to 50,000 times minimum wage; category 4 is 20,000 to 30,000 inhabitants with incomes of 25,000 to 30,000 times minimum wage; category 5 is 10,000 to 20,000 inhabitants with incomes of 15,000 to 25,000 times minimum wage; and category 6 means less than 10,000 inhabitants and incomes totaling up to 15,000 times minimum wage. The minimum monthly wage is equivalent to US\$110.00 (October 2002).

- 1.9 A reform of Colombia's transport sector was carried out in 1992, intended primarily to help the sector's institutions adjust to the new development strategies. As part of the decentralization process it was decided that the central government would be responsible for the main highway system, with responsibility for the rest of the country's roads (secondary and tertiary systems) being transferred to the departments and municipalities. As a result of this process, Cundinamarca's secondary road system was transferred to the departmental government.
- 1.10 Cundinamarca's road system has a total of approximately 21,062 km of highways, divided into the following categories:
  - a. Major or national highways: 761 km of main highways (3.61% of existing roadways in the Department), of which 620 km are paved (flexible asphalt paving), while the remaining 141 km are unpaved. Maintaining these highways is the responsibility of the central government, acting through the National Highways Authority (INVIAS).
  - b. Secondary roads: approximately 8,368 km of feeder roads, 1,869 km of which are paved, while the remaining 6,517 km are unpaved. These are connecting roads carrying traffic between regions, or from one municipality to another. The department's Public Works Secretariat (SOP) is responsible for maintenance of these roads. Of the 8,368 km of roadway making up the secondary network, some 5% are in good condition, 85% are in an average state of repair, and the remaining 10% are deemed to be in poor condition.
  - c. Tertiary roads: 11,578 km of local or rural access roads, making up 56.4% of the department's total road system. Of these minor roads, 10,138 km are the responsibility of the municipal governments, while 1,430 km are looked after by the *Fondo Nacional de Caminos Vecinales* [national road fund]. The municipal administrations participate at the municipal level<sup>3</sup> by co-financing rehabilitation and road maintenance projects in conjunction with the Departmental Development Plan (PDD), and at times by responding to emergencies on roads within their own jurisdiction. Most municipal governments have a Planning Secretariat and a Works Secretariat, or at least an official responsible for roads (in many cases an engineer).
- 1.11 In addition to governments, there are also private sector and mixed public-private entities participating in the sector. Foremost among these are the Coffee Growers Committee of Cundinamarca, which has rendered invaluable assistance with the expansion and maintenance of the network of regional roads; and the community

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<sup>&</sup>lt;sup>3</sup> Some municipalities own their own public works machinery.

action councils<sup>4</sup> and municipal associations<sup>5</sup> which help with routine maintenance and responding to emergencies.

- 1.12 **Toll road concessions.** Cundinamarca has three large toll road concession projects (Chía-Mosquera-Girardot, Troncal del Tequendama and the Centro Occidente Corridor) on the go with private sector operators who have contracted to maintain a 348-km stretch of the departmental highway system in good condition. All three concessions (average age 20 years) are in operation at the present time. The Concessions Division, which is attached to the SOP, is responsible for administration of toll road concession programs.
- 1.13 Planning for these concessions relied on criteria similar to those of the first generation of concessions awarded in Colombia, and over the course of their contracts the operators have run into difficulties, primarily because the projection of traffic levels was based on socioeconomic assumptions that never materialized. In each case, the number of vehicles using the roads failed to meet the Minimum Traffic Guarantee, so that it became necessary to recognize the resulting deficit incurred by the operators. This deficit has been covered by the department which thus fully honored its contractual obligations.
- 1.14 In order to reduce these payments, the department agreed to major renegotiations with the operators of the two largest contracts, under which the minimum traffic guarantee has been reduced to reflect lower projected growth. In the Chía–Girardot concession, the guaranteed average growth rate for traffic was reduced from 7% to 4% beginning in 2007, and in the Centro–Occidente Corridor concession, the rate was reduced from an average 4% to an average of 2%. As well, the department is currently in the process of initiating another renegotiation of the Chía–Girardot concession, which has the highest percentage share in contingent liability arising from this concept.
- 1.15 **Traffic and Transport.** The regulation of traffic on Colombia's highways is the responsibility of the *Departamento de Tránsito y Transporte de Cundinamarca* (DATTC). The mandate of this department is to ensure the proper organization and operation of vehicular traffic and transport in order to safeguard the fundamental freedom of movement enjoyed by the inhabitants of Cundinamarca and other persons traveling through this department, as well as the right to transport goods.
- 1.16 The DATTC enforces the National Traffic Code, issues and approves driver's licenses and maintains traffic signs on the department's roads and highways to

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<sup>&</sup>lt;sup>4</sup> Made up of persons living in a municipality or district.

There are 13 municipal associations that together make up the operational support system. Their membership is drawn from the municipalities within the provincial region, and they are headed by an Association Director. Via participation in a selection process, the Department contracts with these associations for construction, improvement and maintenance of certain roads.

make them safer for drivers and their vehicles. Traffic enforcement and operations is overseen by Cundinamarca's police force through its specialized highway patrol branch. As the agency responsible for road safety in Cundinamarca, the DATTC maintains close coordination with the Ministry of Transport, the Accident Prevention Fund, and the Highway Patrol Branch.

- 1.17 **Highway safety.** As in the rest of Colombia, the accident rate on Cundinamarca's roads and highways is too high. The authorities are aware of this problem and have launched various studies and programs to promote safety.
- 1.18 In 2001 there were 2,457 accidents on the department's roads and highways (main, secondary and tertiary systems), resulting in 1,442 injured and 360 fatalities. These figures represent 1.0%, 3.1% and 5.7% of the national totals for highway accidents, injuries and deaths, respectively. A large proportion of these accidents occurred on highways maintained by INVIAS, the rest on roads for which the SOP and the municipalities are responsible.
- 1.19 A number of traffic control agreements have been signed between the Accident Prevention Fund and the Cundinamarca Police, under which special studies --such as one to identify hazardous locations—and numerous educational programs and information campaigns have been carried out to improve highway safety. In a separate project, the Accident Prevention Fund is helping to prepare highway safety studies and providing technical support for the DATT. A special poster on highway accidents in the department is produced annually. At the national level, the Ministry of Transport has drawn up guidelines for a National Highway Safety Plan which, among other things, will include the promotion of additional studies, better research on the causes of accidents, improved design regulations and educational campaigns.
- 1.20 Although coordination exists between the DATTC and SOP, an integrated highway safety plan is needed which would include activities involving traffic, enforcement and training programs for authorities, drivers, pedestrians and other persons making use of the system of roads and highways. Up to now, such actions have been mounted in response to immediate, short-term needs only, rather than as part of an established and comprehensive plan.
- 1.21 **Administration of the network of secondary roads.** The SOP has shown itself to be highly effective in carrying out highway construction projects, but would now like to reinforce its institutional and technical capacity in order to improve its effectiveness as the administrative body responsible for the network of secondary roads.
- 1.22 Cundinamarca's strategy for the highway sector is set out in the Departmental Development Plan (PDD). The SOP administers the investments called for in this plan according to availability of resources allocated through the Department's Finance and Planning Secretariats, or by means of co-financing agreements with

other public entities. In practice, the SOP does not engage in highway planning, nor does it have budgetary autonomy; its activities are limited to the scheduling of operations. The SOP's carries on its activities in the highway sector through the administration of investment projects and maintenance services. Rather than maintaining an in-house capacity of its own, the SOP works by contracting with private sector operators. In addition, the SOP is responsible for conducting environmental assessments for highway projects.

- 1.23 Meanwhile, there are other national entities which, although responsible for works projects in the department's highway sector, nevertheless lack proper coordination with the SOP. Despite the fact that the departmental road network is to a large extent well-defined, additional vetting is required since there are sections that fall within the jurisdiction of the SOP, and at the same time are under the supervision of other entities active in this sector.
- 1.24 Within the SOP, the Transport Infrastructure Directorate is the office responsible for managing the road system. The directorate has various work groups that carry out the related tasks, but there are no specialized groups with responsibility for maintenance, managing environmental aspects, and planning/scheduling of works. To this must be added the need for centralization and systematic processing of the sector's information. And finally, the SOP's hardware is obsolete and in need of modernization.
- 1.25 **Highway maintenance**. The department provides routine and regular maintenance of the road network under its jurisdiction by contract, wherever possible by contracting for these services with microenterprises and cooperative labor enterprises.
- 1.26 Traditionally, highway maintenance in the department was provided at the district or zone level using the government's own equipment and personnel. Beginning in 1996, this system went through radical change: in effect, the sector underwent a massive administrative restructuring in which existing machinery was disposed of and maintenance personnel were laid off. From that point on, the departmental government assumed the role of maintenance administrator and began contracting out all of the actual work. Thus the department has adopted a system similar to that established by INVIAS for federal highways, one in which program planning is the responsibility of the central authority, a small group of highway administrators serve as advisers and coordinators, several microenterprises are recruited to provide routine maintenance, and a series of private contractors are hired to carry out regular maintenance and emergency services when required.
- 1.27 In Cundinamarca, however, this process is just now at the implementation stage. There are as yet no highway administrators. Instead, this function is being carried out by supervisory officials in the government. Progress has been made in the use of municipal associations, community action councils and cooperative labor

- enterprises to carry out maintenance work. However, these new mechanisms have not been in place long enough to measure their effectiveness.
- 1.28 Although the budget for highway maintenance has not been abundant, the main problem has been not so much a lack of resources, as the failure to set priorities, carry out program planning and evaluate activities. Planning of maintenance has been carried out only sporadically, with work scheduled more in response to immediate needs based on visual inspections and the requirements of affected communities rather than a maintenance strategy. This lack of planned maintenance, together with reduced investment in highway rehabilitation projects in the last decade, has left 85% of the network in worn condition.<sup>6</sup> It is necessary to strengthen the SOP's ability to program these activities, ensuring that proper maintenance priorities are set and available resources are used to best advantage.
- 1.29 With respect to overweight transport problems, heavy-weight loads in Cundinamarca generally move over the main highway network, not over secondary roads. INVIAS recently (2001) conducted a study of effective loads carried on the secondary road network. The findings of this study have been incorporated into the design parameters for Cundinamarca's secondary road system.

## D. Institutional weaknesses of the department

- 1.30 Although the Colombian Constitution requires departmental planning bodies to "evaluate management performance and assess the results achieved through development and investment plans and programs",7 Cundinamarca does not yet have an integrated system for carrying out these functions. Important advances have been made, such as establishing goals under the PDD and defining indicators. However, no system for monitoring and evaluation of results has been created to ensure coordination between planning procedures and those used for scheduling and budget execution on the one hand, and budget execution and management performance and results achieved on the other hand. To the above must be added the lack of statistical information that can be used to develop a framework and make it easier to design effective policies. Cundinamarca's Administrative Planning Department (DAPC) has an Office of Information, Analysis and Statistics which compiles and analyzes statistical, economic and geographical (GIS) information. However, this unit does not have the capacity to meet the information requirements of the Department.
- 1.31 While the departmental government has partially implemented an information system in its Treasury, Accounting and Budget Division, this system does not have all of the modules needed for managing collections, public debt, procurement and

<sup>&</sup>lt;sup>6</sup> The portions of the network that are in worn or poor condition are those in least demand; over 80% have ADT of less than 200.

Article 344 of the Political Constitution of Colombia.

asset administration. Moreover, the units responsible for expenditures do not have access to the information required for supervision and follow-up. To correct this situation, the department signed a project agreement in August 2002 with the Program to Strengthen Local Financial Information Systems (FOSIT), which is being carried out by the Ministry of Finance by means of a loan from the Bank. The objectives of the project are to implement the Financial Management System for Local Administrations (SGFT) and ensure integration with the Public Financial Information and Treasury Consolidator.

- 1.32 The taxpayer data base is incomplete since it includes only those persons who have met their obligation to register. The department's tax procedures are overly complicated and information relating to evasion and smuggling is woefully inadequate, making it difficult to conduct tax audits and seriously affecting the department's finances.
- 1.33 The government of Cundinamarca has difficulty managing information since it lacks the computer systems required for rapid processing of data. Most of its data must therefore be processed by hand, causing delays, reducing reliability and tying up needed resources. The personnel involved are largely unfamiliar with computers and little inclined to accept the changes implicit in automated data processing. Finally, no policy has been established on standardization and data consolidation.
- 1.34 **Management support systems**. The department is approaching a critical situation owing to its lack of inventories, controls and computer systems, and the absence of policies on paperwork management and the organization of documents. To this must be added the staff's lack of experience with document handling and the procedures used for this purpose, and the absence of a client-oriented service culture in the department. And lastly, Central Archives are overflowing with documents of every sort, making access difficult and time-consuming.
- 1.35 The inventory of real property has not been updated, the properties themselves have not been appraised and many have not even been registered or a proper title obtained. In the documentation available to the department there are references to 454 properties, but to date the total number of property titles is only 252. The untitled properties are currently being verified. With the administrative restructuring in 1996, various decentralized offices disappeared from the department's organizational chart (Public Works Districts, Farming Operations and Inspections), and many of the physical plants were turned over to municipalities without being duly documented. This hinders the preparation of a reliable financial statement, and the ability to administer or give a precise accounting of the department's assets.
- 1.36 The performance evaluation system has proceeded in orderly fashion, but is of only limited usefulness. A review of the most recent exercise shows that 70% of the officials evaluated were rated as "Excellent"; 23% as "Superior"; and 7% as

- "Adequate". Since "Adequate" is the lowest rating that can be given, the system is of little use as a means of evaluation and promotion. In addition, the current method of evaluation applies only to career civil servants, and not to provisional or term employees.
- 1.37 The internal control system has weaknesses that must be corrected if it is to be transformed into an effective mechanism for management support and control. Its deficiencies include the absence of: (i) a code of ethics or equivalent guidelines; (ii) instruments for measuring operating efficiency; (iii) a risk analysis methodology to direct the design and operation of monitoring activities; (iv) formal procedures and assignment of responsibility for reconciling accounting records with operating information; (v) mechanisms for conducting self-evaluation of control operations; (vi) functions and procedures for receiving, evaluating and acting on the comments and recommendations of the Office of Internal Audits and the departmental controller; and (vii) modern management methods and technology for the Office of Internal Audits.
- 1.38 The department's ability to provide municipalities with advice and technical assistance is limited and in many cases it has not been possible to do so at the local level. In order to close the gap between the department administration and the municipalities, the Provincial Administration Centers (CAPs) was created as a decentralization mechanism and information link to support local and regional development planning. Among their other duties, the CAPs provide support for efforts to identify, formulate and oversee projects. However, this mechanism has failed to live up to the expectations of either the departmental government or the municipalities owing to a lack of personnel and resources.
- 1.39 Development of the institutional capabilities of the municipal administrations has been uneven but the great majority lack the necessary technical skills and qualified human resources. They have had difficulty in formulating and managing budgets, collecting taxes, and designing and carrying out investment projects, among other responsibilities. The certification issued by the Controller General's Office (CGR) as proof of compliance with the requirements of Law 617/2000—which sets a limit on the ratio between operating costs and current and disposable revenues (95% for 2001 for categories 4, 5 and 6)—revealed that 17% of the department's municipalities failed to meet that objective, 14% scored in the 80-95% range, and 16% were missing the necessary information. As well, they were found to be generally overstaffed and top-heavy in their organizational structures, and lacking in clear-cut procedures, jurisdictions and distribution of duties. Moreover, their tax systems are seriously flawed with the result that these administrations are incapable of collecting or generating their own resources.
- 1.40 While 112 municipalities have adopted a land-use plan, this turns out to be nothing more than a formal exercise rather than a guide for regional development, since many of these documents reflect a strictly local vision and lack an overall proposal

for development. And the fact that they are not accompanied by formulation of an interim plan and realization of a property increment<sup>8</sup>, makes it difficult to plan and ensure that investments are mutually complementary. With regard to the Geographic Information System (GIS), the department provided them with basic urban and rural maps, but their lack of sufficient technical and financial capacity prevented the municipalities from bringing the information together under the GIS to formulate local land-use proposals and developing a comprehensive vision of their territory.

## E. The Bank's strategy and experience

- 1.41 The current Country Document (GN-2052) designates five high-priority areas: (i) support for the peace process; (ii) reduction of poverty and inequalities; (iii) consolidating progress in the decentralization process; (iv) modernization of the State; and (v) achieving sustainable growth. By supporting development of regional infrastructure and providing institutional strengthening, this operation will contribute directly to the attainment of objectives (iii), (iv) and (v). Improvement of the highway system will lower shipping costs, thus improving productivity, making the region's products more competitive, and helping to ensure sustainable growth. The operation will also make it easier to work in close coordination at all levels of government, encouraging greater decentralization.
- 1.42 The Bank has provided support for various infrastructure programs in Colombia. The US\$240-million transportation corridors program (706-0C/CO), approved in 1993 and carried out by INVIAS, represents the Bank's most important recent experience in the execution of highway initiatives. The highway subprogram under that initiative involved rehabilitation and rebuilding projects, as well as construction of new sections and bridges on the country's major highway network, including execution of works on more than 20 highway projects and 100 bridges. The transportation corridors program also included a rail subprogram for US\$60 million.
- 1.43 Among the vital lessons learned during execution of that program are the need to ensure the quality and precision of all studies, designs and cost estimates, and the importance of careful analysis of needs before purchasing land for the works. Other lessons include the need to ensure that the appropriate environmental permits are obtained in advance, and that the necessary signage and road marking works are included in all projects. Finally, it is vitally important to ensure, by means of the most rigorous analysis, that the executing agency has the requisite institutional capacity. All of these lessons have been taken into account in the design of the present operation.

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This is a rise in property value resulting from the administrative actions of the State.

- 1.44 In the infrastructure sector, the Bank financed a program entitled Support of Privatization and Concessions in Infrastructure (927/0C-CO) which helped design and organize specific privatization and infrastructure concession projects, as well as supporting development of the necessary regulations and sectoral policies. The 1997 Departamental Roads Program (1075/OC-CO) was originally designed for rehabilitation and upgrading of the secondary road system which had only recently been transferred from national to department jurisdiction. In the year 2000, this loan contract was amended and the resources redirected for reconstruction of the trunk line *Cafetera* as a result of the earthquake in 1999 which did extensive damage to this region.
- The Bank possesses a wide range of experience in institutional modernization and 1.45 reform, among which is the recently approved program to provide Institution Strengthening for the District of Bogotá (1385/OC-CO). The Bank also has two projects under way relating to fiscal and financial aspects of local administrations: Strengthening of Local Government Administrations (977/OC-CO) and Strengthening of the Subnational Financial Information System (1053/OC-CO). The Second Municipal Development Program (1066/OC-CO) provides support improvement of municipal infrastructure through the financing of projects. These programs are linked to specific components of the operation proposed here. In the case of loan 977/OC-CO, the institutional strengthening that it has been providing at the national level for municipalities that are renegotiating their debt will be adjusted and applied to a number of municipalities in Cundinamarca. Something similar will occur with loan 1053/OC-CO, a program in which the executing agency will provide technical assistance to help the Finance Secretariat develop financial information systems. This has enabled the Bank to accumulate a wealth of experience with this type of project, significantly improving its formulations and execution of such initiatives.
- 1.46 As to operations with other multilateral agencies, the Department of Cundinamarca is also negotiating an education loan for US\$15 million with the World Bank to expand the coverage of basic education in rural areas. The World Bank and the IDB have worked closely together in preparing the two operations, coordinating their activities, particularly to see how the Ministry of Education can draw on the institutional strengthening component to implement the World Bank operation more effectively.

## F. The department's strategy

1.47 At the start of each departmental administration, a development plan is prepared which lays out the policies, strategies and programs that the government will pursue during its term of office. The current development plan, entitled "Working together for Cundinamarca", sets the following policies, among others:

- Improve the quality of life for the inhabitants of Cundinamarca.
- Strengthen the decentralization plan.
- Promote the hiring of community-based cooperative enterprises.
- Upgrade transport infrastructure.
- Improve the efficiency, quality and coverage of public services.
- 1.48 The drafting of the development plan is coordinated by the DAPC. Local communities also participate in the preparation of this plan through discussion groups in the various municipalities which identify their most important needs and select the projects to be included in the plan.
- 1.49 Upon taking office in 2001, the present administration adopted Departmental Development Plan 2001/2004 which lists "seven interconnected principles": (i) overall development of the human person; (ii) productivity and competitiveness; (iii) security and peaceful coexistence; (iv) social development infrastructure and services; (v) institutional strengthening; (vi) technological advancement; and (vii) strengthening of regional land management.
- 1.50 The first three constitute a mission statement for the administration, defining the basic goals or objectives of the plan, which are to seek development of the human person, productivity and security. The next three principles spell out the means by which these goals will be achieved, namely through improvement of infrastructure and services, strengthening of institutions and the introduction of new technology. Given its unifying effect, the last of these principles is deemed to provide an overall framework for the plan as it promotes improvement of land management and strengthening of the relationship between Bogotá and Cundinamarca.
- 1.51 Managing the highway system comes under infrastructure activities. It gives fundamental priority to the works projects included in the two ring-road systems (an inner beltway around the Bogotá savanna, and an outer ring road around the borders of the department) and seven regional trunk lines.
- 1.52 The current administration has been working very hard to implement the PDD. As part of this process, the government has decided to seek external financing for those activities which require a major investment, and in which it is felt that participation by multilateral lending agencies will represent significant value added.

### G. The program's strategy

1.53 In line with its strategy, the department has requested a loan from the Bank to finance activities relating to the implementation of principles (iv), (v), (vi) and (vii) of the PDD. The proposed program will fund activities in these key areas

- through improvement of the secondary road system to facilitate access and foster regional integration, and institutional strengthening to enhance the departmental government's planning and management capacity.
- 1.54 Specifically, the activities laid out in the PDD that relate to the highway sector, and that are to be financed under this program, will seek to improve the department's secondary road infrastructure as a means of optimizing interconnectivity and competition within the region. This strategy is based on improving key elements of that infrastructure, such as the two ring-road systems and seven regional corridors where demand is highest.
- 1.55 On the institutional front, major strides have been made in implementing a new departmental structure, resulting in a more efficient and better coordinated organization. Nevertheless, there is still a need for improvement of certain aspects of the department's operations, particularly in areas related to overseeing implementation and evaluation of the PDD, fiscal and financial administration, information systems, management support and provision of technical assistance for the municipalities. The program will serve to reinforce all of these activities.

#### II. THE PROGRAM

### A. Objectives

- 2.1 The overall objective is to upgrade highway infrastructure in the department, reducing transportation costs and improving regional accessibility, as well as enhancing the institutional capacity of the departmental government and its municipal administrations.
- 2.2 Its specific objectives in the highway sector are to: (i) upgrade the system of secondary roads, increasing regional interconnectivity and reducing transportation costs, (ii) enhance the performance of highway maintenance services, and (iii) improve highway administration by the Public Works Secretariat, including the ability to deal with environmental issues in projects. And, in the area of institutional strengthening, to: (i) reinforce the systems for planning, monitoring and evaluating management performance, including implementation of the District Financial Management System (SGFT) and the Departmental Information System (SIDEP); (ii) create a system to manage the department's documents, modernize and evaluate the inventory system, and strengthen performance evaluation and internal audit systems; and (iii) provide technical assistance to selected municipalities in the areas of administration, fiscal and financial management and land-use planning.

## B. Description of the program

2.3 The program will consist of two subprograms, one to improve the road system and the other to provide institutional strengthening, the two linked by a common goal: that of paving the way for implementation of the PDD. The program seeks to facilitate regional development and accessibility by improving the highway system and enhancing the department's management capacity so that it can make the best possible use of its resources.

#### 1. Highway improvement subprogram (US\$21.9 million)

#### a. Investment in highway sector (US\$20.4 million)

2.4 Resources will be provided to finance the highway works projects identified in the investment program contained in the Departmental Development Plan 2001-2004. This component is designed to enhance the region's competitiveness through the paving, upgrading and rehabilitation of the secondary road system, especially in sections of strategic importance for regional development or identified as high-priority sections in the department's municipal development plans. None of the projects financed will be in areas operating under a concession.

- 2.5 Accordingly, resources will be allocated for: (i) strategically chosen projects in the secondary road network which make structural improvements and extend the length of the department's road system, with a view to fostering regional integration and reducing overall transportation costs; and (ii) high-priority projects in the secondary road network, identified with community input in the department-municipality consultation groups convened during preparation of the Departmental Development Plan. The 43 projects identified, which total approximately 230 km of roadway in all, will meet the municipalities' transportation needs while at the same time connecting production areas with the more developed centers.
- 2.6 In addition to the Departmental Development Plan, the selection of projects for inclusion in the program took into account current levels of demand measured in terms of ADT (Average Daily Traffic), the present condition of the roads, and the citizen participation process carried out in each of the department's 116 municipalities. In this process, the local authorities, together with representatives of civil society and the communities involved, participated in regional discussion groups where they selected high priority projects to be carried out in the program.
- 2.7 The works envisaged will involve the upgrading and rehabilitation of existing highways. These works will complete the development of two ring road systems (one internal and one external) and seven regional trunk lines: (i) the internal beltway that circumscribes the district capital and permits traffic to bypass urban areas; (ii) the external ring road system connecting border regions of the department; and (iii) the system of trunk lines<sup>9</sup>, intersecting with the two ring road systems to ensure interconnectivity among the regions and guaranteeing the flow of goods between the department and other parts of the country, and the capital.
- 2.8 The amount of financing required for each project includes both construction work itself, and management (supervision) and engineering. The work will be packaged into groups of 4 or 5 subprojects each, according to geographical location and type of work required, in order to be large enough for economies of scale and to be more attractive to contractors. The bridge works project will be let as a lump-sum contract.
- 2.9 Under this component a total of US\$300,000 will be allocated for safety improvements in the department's secondary road system. These improvements will be identified in the Highway Safety Plan to be produced as part of the institutional strengthening component for the highway sector (paragraph 2.23). These resources will be used for specific improvements in infrastructure or signage at hazardous sections in the road system.

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The trunk lines involved are: Cafetera, Río Negro, Llano, Carbón, Guavio y Teusacá, Magdalena medio and La Esmeralda

#### b. Highway maintenance administration system (US\$700,000)

- 2.10 Resources will be provided to finance the development and implementation of an administration and evaluation system for routine highway maintenance (SAMR), which will improve program planning of activities, plus the contracting system and supervision of same, as well as developing the indicators needed to evaluate their effectiveness. These indicators will be input automatically into the department's information system SIDEP.
- 2.11 This maintenance system will be developed by a specialized international consultancy hired for this purpose. The consultants will be required to introduce a system for planning, programming, reporting and monitoring the various routine maintenance activities, and create computerized inventory and management tools while involving the staff of the SOP's Transport Infrastructure Division in these tasks and transferring to them the experience and technology necessary to ensure subsequent and systematic use of this system and these tools.
- 2.12 As part of their activities, the consultants will study the present procedures of the SOP for performing routine road maintenance, and will determine the capacity of existing maintenance service providers to perform the required services based on the real needs of the road system and availability of resources. This work will include the study and analysis of various methods and practices used to carry out routine maintenance, including the use of municipal associations, cooperative enterprises and community action councils, or direct purchase of service, or any combination of these methods. The consultants will determine the conditions under which one or another of these methods is the most appropriate way to carry out maintenance works. In the scheduling of routine maintenance work, emphasis will be placed on highway safety and proper drainage facilities for all roads and highways.
- As a pilot project, the consultancy hired for this task will include implementation of the SAMR within the 1200-km portion of the secondary road system that comprises the two ring-road systems and the seven regional trunk lines where works projects will be carried out under the program. This will enable managers to assign priority to the most critical sections of the network and ensure that the roads and highways included in the program receive routine maintenance services as appropriate.

### c. Strengthening of the SOP (US\$800,000)

2.14 The Public Works Secretariat will receive assistance to enhance its technical capacity, enabling it to perform its role as planning authority and manager of the secondary road system. At the same time its ability to provide technical and institutional assistance to the municipalities will be reinforced, so that they will be better prepared to manage the roads within their jurisdiction. The activities to be funded under this subcomponent form part of the institutional strengthening effort

prepared by the SOP. The plan calls for action in four separate areas: (i) for the institutional framework of the highway sector, including coordination among the agencies; (ii) institutional strengthening at the departmental level (for the SOP); (iii) support for highway safety improvements; and (iv) support for municipalities.

- 2.15 **The highway sector's institutional setting and coordination among its agencies (US\$310,000).** To reinforce the institutional framework within the highway sector, a Transport Information Center will be created, the secondary highway classification system will be updated, and a study will be conducted to determine the sources of financing for investments in the road and highway system.
- 2.16 A specialized consulting firm will be hired to provide training and other support for the creation of an information center to gather data relating to transportation and the department's road system. This center will supply the information required for highway planning, identification and supervision of projects, analysis of hazardous sections of roads and highways, and so forth.
- 2.17 A specialized consultant will be hired to update the system used to classify the secondary road network. The analysis carried out for this purpose will include modernization of the georeferencing information system in use, particularly that used by the SOP. A highway classification proposal will be prepared which will include clear identification of the roads and highways for which the department is to be responsible, and development of a strategy for transferring to municipalities those roads that play no part in regional integration.
- 2.18 Financing will be provided as well for drawing up a highway investment plan, including analysis of alternative sources of funding in the department under different scenarios affecting availability of resources. The latter study will encompass a wide range of sources including national and departmental funding, co-financing, tolls, private sector participation, valuation, loans and other options to be identified.
- 2.19 **Strengthening for the SOP (US\$270,000).** In order to strengthen the SOP, funds will be provided for implementation of highway planning tools, training of SOP personnel in specific planning methods, and improvements in managing the environment and contract supervision. In addition, assistance will be provided in the procurement of computer equipment and software.
- 2.20 The program will help set up a planning group within the SOP to coordinate activities with other programs such as the information center, and to review the department's road network and its highway investment and highway safety plans. Suitable planning tools for the SOP will be identified (HDM-IV, Maptitude and project supervision models, etc.), along with its requirements for additional computer equipment and software, and training programs will be provided for the Secretariat's staff in the use of these tools.

- 2.21 In the area of contract supervision, financing will be provided to develop a computerized system for monitoring performance under contracts signed by the SOP. This system will be designed to generate up-to-date and reliable information on the status of each project, and must include automated coordination with the Departmental Information System (SIDEP).
- 2.22 Support will be provided as well for the establishment of a group to manage the environmental and social aspects of the highway projects undertaken by the Public Works Secretariat. To this end the program will finance: (i) preparation of a Manual on Evaluating and Managing the Environmental and Social Aspects of Highway Projects; and (ii) training for SOP planning and works officials and, in particular, members of the above-mentioned environmental management group, in the interpretation and application of the manual. In preparing the manual, the lessons learned in earlier operations under the *Fondo Nacional de Caminos Vecinales*, FINDETER and INVIAS will be taken into account, in addition to the experience gained by international agencies working in Colombia.
- 2.23 **Highway safety plan (US\$150,000).** A comprehensive highway safety plan will be developed, enabling authorities to identify the actions that are necessary to reduce the current high rate of accidents on the department's road system. This plan will include: (i) identifying actions required for improvement of infrastructure such as signage and road marking projects; (ii) determining the need for studies and traffic control research; (iii) training programs and education for highway officials and the drivers, pedestrians and other users of the department's road system; and (iv) updating and improvement of the data base. The highway investment component of the program includes a US\$300,000 subcomponent to finance implementation of the actions identified in the highway safety plan.
- 2.24 **Highway management support for municipalities (US\$70,000).** Municipalities will receive support to improve highway management and maintenance services on portions of the road network under their jurisdiction, create a system for the contracting of these services, and define indicators required for supervision and evaluation of performance under maintenance contracts.
- 2.25 The tasks to be financed include a study on the highway maintenance services currently being performed by the municipalities and municipal associations. This study will begin by identifying those municipalities that carry out maintenance work directly or through membership in an association of municipalities formed for this purpose, and determining the area covered in each case. The results of this study will then be used to identify institutional strengthening needs in terms of training for their personnel, preparation of operating manuals and guides, workshops, etc.

## 2. Institutional strengthening subprogram (US\$6.8 million)

- 2.26 The subprogram for institutional strengthening will be divided into three components: (i) strengthening of financial administration and planning systems; (ii) reinforcement of management support systems; and (iii) technical assistance for municipalities in the areas of administration, fiscal and financial management, and land-use planning.
- 2.27 **Reinforcement of planning, financial administration and information systems** (US\$3.1 million). This component will include four activities: (i) planning, monitoring and evaluation of management and performance; (ii) consolidation of financial administration; (iii) strengthening of oversight and collection of departmental revenues; and (iv) creation of the Departmental Information System (SIDEP).
- 2.28 The consolidation of a system for planning, supervision and evaluation will strengthen the departmental government's capacity for technical planning, help to develop a positive attitude toward management evaluation, and permit the introduction of transparency and efficiency as criteria in managerial decision-making and administrative control. With this as the goal, the program will finance the following activities: (i) training in the design and use of indicators, as well as formulation and evaluation of projects; (ii) design and development of data records; (iii) computerization of the department's planning procedures, which includes the project data bank, contract supervision performed by the department, and production of indicators for monitoring and evaluation of the PDD; and (iv) strengthening of the Office of Information Analysis and Statistics, and the supervisory agencies, by providing them with equipment and upgrading staff qualifications. The system of supervision, i.e. data records and application of indicators, will include coordination with the SIDEP as one of its specific modules.
- 2.29 Implementation of the District Financial Management System (SGFT) will allow integrated programming and preparation of the budget, monitoring of expenditures and issuance of financial statements in accordance with rules laid down by the Auditor General's Office, as well as providing support for advance controls and audit operations. This system will also include collection, public debt, supply and services (procurement and inventories) and asset administration modules. To do this the program will fund the following activities, which are to be carried out under the FOSIT-Department of Cundinamarca Agreement: (i) hire consultancy to review and clean up the existing information in the data bases of the Finance Secretariat; (ii) draw up and execute the plan for migration of the information into the new structure proposed by FOSIT; and (iii) purchase computer hardware, network equipment, and software licenses.
- 2.30 In order to help the departmental government increase its revenues, the program will finance the purchase and installation of specialized taxation software, and hire

consultants to: (i) create the taxpayer data base using census results in coordination with various sources of information; (ii) formulate and adopt comprehensive strategies for taxpayer service, including personalized attention via the new Supercades<sup>10</sup>; (iii) implement new tax payment options by creating a Web page for the Finance Secretariat and allowing payment by electronic means and debit or credit cards; and (iv) open information and claims centers. Finally, to reduce tax evasion the program will provide for recruitment of consultants to study the methods used and degree to which the income tax is being circumvented; design and place in operation a system for preventing evasion; draw up a proposal for coordination of activities among the agencies combating the different methods of contravening tax legislation; and creation of a tax evasion information system.

- 2.31 The above-mentioned systems will be implemented using the Enterprise Resource Planning program, which is a software package which provides integrated management of an institution's business procedures. Relying on an ERP-type solution will offer the departmental government an opportunity to plan its revenues on the basis of the current PDD, taking into account its institutional mission and financial plans for coming years. Among other advantages, this type of solution will permit horizontal integration of the various government agencies, as well as vertical integration of the different local administrations, sharing a common storehouse of information so that everyone in the institution is working with the same information. This will provide the platform for the administrative, technical and financial systems of the departmental government.
- 2.32 The SIDEP is an integrated systems model which consolidates operational and statistical information from the agencies in the department's central sector. During preparation of this program, advances were made in the study of its applications, the evaluation of its technology infrastructure, and in the general design of the SIDEP, as well as in its scaling. For its reinforcement, the program will finance recruitment of consultants to: (i) update its strategic plan for information systems; (ii) prepare detailed design work for computer applications; (iii) complete detailed design of the SIDEP and its management module (balanced scorecard); (iv) set up the structure of the SIDEP, including selected data processing applications and the balanced scorecard; (v) build the connectors and data storage to permit presentation of management indicators and signals for the supervision and evaluation of management by objectives; and (vi) purchase of software licenses and additional equipment for the data center.
- 2.33 **Strengthening management support systems (US\$1.8 million).** This component will include four management support systems: (i) managing the department's documents; (ii) updating and valuation of inventories of real property;

The Supercades are public service centers which the City Council of Bogota is making available for its citizens under a program financed by the Bank (1385/OC-CO).

- (iii) planning, measurement of results and evaluation of performance by personnel; and (iv) internal auditing.
- 2 34 The document management system must permit each type of document to be handled appropriately based on its particular characteristics, applicability and retention period, as well as the institution's research and consultation needs. The execution of this component include implementation of systems for correspondence management, management files and central archives, as well as providing assistance for decentralized entities. The program will provide resources to hire consultants for: (i) standardization and verification of archival processing, and formulation of a manual of procedures; (ii) training for officials at the central level and assistance for the municipalities and decentralized entities in document administration; (iii) systematic classification of procedures; (iv) organization and digitalization of documents selected from the central archives; and (v) dissemination through publications and guides. The above systems will form part of the department's administrative, technical and financial platform, and will be developed in coordination with the different agencies of the departmental government, particularly the SOP where matters relating to its information center are involved. Funds will also be provided for the purchase of additional equipment and licenses required to support this area.
- 2.35 Updating the appraised value of its real property will enable the department to determine the criteria for location, physical condition, productive capacity, market status, marketability, capital-generating opportunities, allocations and replacement cost, as well as ascertaining that ensure values correspond to actual worth. To this end the program will provide funds to hire consulting services to: (i) conduct photographic and georeferenced topographic surveys for the purpose of updating the inventory of assets; (ii) update cadastral mapping; (iii) appraise particular properties; (iv) clearing of titles; and (v) systematic organization of the information and creation of the corresponding data bank. The program will also finance the purchase of equipment and determination of key parameters of the respective module of the administrative and financial platform, and the licensing of additional software to obtain georeferenced and up-to-date information on all property owned by the departmental government.
- 2.36 Strengthening of the present system for measuring and effectiveness and evaluating the performance of its personnel will help to ensure continuous improvement of the department's services and levels of production, and reduce the risk that staff evaluations will be carried out simply to satisfy legal requirements. The activities to be financed include: (i) a study of the present system for staff evaluation and assessment; (ii) design and utilization of performance indicators, and identification of results and impact; (iii) training for evaluators and evaluated alike in the handling of evaluation tools and in key management and personnel development areas; and (iv) design and implementation of a staff performance information

- system. This system will apply to all departmental personnel, regardless of their ranking in the hierarchy or employment classification.
- 2.37 The weaknesses in the Internal Control System (SCI) call into question the efficiency, effectiveness and reliability of its information, and its capacity to ensure transparency in administration of departmental resources. In fact, the quality of the SCI has a major impact on the performance of every unit in the organization, affecting the ability to carry out their core duties. Accordingly, high priority must be placed on strengthening the SCI through the following actions: (i) diagnostic study and adjustment or redesign of the SCI; (ii) training of personnel responsible for decisions affecting the SCI (supervisory staff); (iii) analysis of the organization and operation of the existing Office of Internal Audits (OCI), based on Colombia's legal standards and generally accepted international best-practice guidelines; (iv) correction or redesign of the manuals of operations and methods used in conducting internal audits; (v) design or adaptation of technological tools that will improve the efficiency and effectiveness of the OCI; and (vi) training for OCI official in the use of new methodologies.
- 2.38 **Technical assistance for municipalities in fiscal and financial management and land-use planning (US\$1.9 million).** This component will concern itself with three interrelated areas of activity: (i) modernization of the CAPs; (ii) providing advice to municipalities on administrative, fiscal and financial management; and (iii) improving procedures for local and regional land-use planning.
- 2.39 Modernizing the technical, operating and administrative functions of the CAPs is intended to reinforce the decentralization process and regional and local development. In preparing this program, the department evaluated the capacity of each CAP to meet the requirements of the municipalities in its area, and determined the requirements for its operation. Based on this information, the component will finance the following activities: (i) training programs for CAP personnel; (ii) upgrading of physical infrastructure and communications with the departmental government; and (iii) provision of computer hardware, topography software and radio communications equipment.
- 2.40 By providing advice to municipalities on administrative, fiscal and financial management, the department will seek to help selected municipalities become more financially self-supporting, guiding them in methods for increasing tax proceeds and reducing expenditures. The program will provide financing primarily for the hiring of consultants to provide technical assistance and monitor the progress of municipalities, and specifically to: (i) analyze their organizational structure and staff operations, and introduce administrative restructuring; (ii) study the current situation with respect to local finances, and tax administration and collections; (iii) design and implement a fiscal and financial consolidation program capable of meeting current fiscal regulations and eliminating each municipality's liabilities; (iv) provide training for municipal officials; (v) introduce integrated financial

administration systems in selected municipalities; and (vi) strengthen the department's technical capacity in these areas. These services will be provided for municipalities that: (a) indicate their interest and have the resources available to cofinance the project (except for municipalities in category six)<sup>11</sup>, (b) those that have not met the parameters of Law 617/2000 based on certification issued by the CGR, (c) those not experiencing a high level of violence, and (d) municipalities deemed to have a poor performance<sup>12</sup>, according to the results for fiscal year 2000, as determined by the DNP. In addition, this project will include a number of municipalities that have shown adequate fiscal results, and that will have the opportunity to co-finance the above services. The program is designed to include up to 50 of the department's 116 municipalities.

2.41 The technical assistance for land-use planning will seek to aid municipalities in implementing, supervising and evaluating the POTs which they are required to introduce under Ley de Desarrollo Territorial, nº 388/97. The program will provide for the hiring of consultants to: (i) design methods for coordinating local land-use proposals, including systems for evaluation and supervision of the POTs; (ii) analyze and assess the land-use plans, propose changes and formulate land management proposals based on a comprehensive approach to regional development and the protection of fragile or environmentally sensitive areas, archeological sites, and other protected areas defined in law; (iii) hold workshops at the provincial and departmental level to train municipal and departmental officials in aspects of regional planning and protection of nature areas or environmentally sensitive zones, cultural heritage, etc.; (iv) assist in the preparation and implementation of partial and property-increment planning; and (v) design the regional mapping platform strengthen the data processing capacity of the department's Geographic Information System.

#### C. Costs and financing

2.42 The total estimated cost of the program will be US\$31 million, including the Bank's Loan of US\$21.7 million and a counterpart contribution of US\$9.3 million from the departmental government. The project will be executed over a period of 48 months. The following table gives a summary of costs for the main components of the program.

Cofinancing in the amount of 10% of the cost of services for those in category 5, and 20% for the others.

Departamento Nacional de Planeación, Documento CONPES No. 3165 of May 10, 2002. The evaluation criteria are: (a) percentage of current income spent on operations, (b) size of the debt, (c) percentage of income represented by transfers, (d) percentage of income corresponding to internally generated funds, (e) percentage of total expenditures earmarked for investment, and (f) savings capacity.

Table II-1. Budget of the Highway Development and Institutional Strengthening Program for Cundinamarca

BUDGET (US\$) Thousands	Total	IDB	Local	%
1. HIGHWAY IMPROVEMENT	21,870	16,155	5,715	71%
1.1 Funding and supervision of works projects	20,370	15,105	5,265	66%
i) highway projects identified	18,607	14,871	3,736	60%
ii) other highway projects	1,463	24	1,439	5%
iii) highway safety improvements	300	210	90	1%
1.2 System for Administration of Maintenance	700	490	210	2%
1.3 Strengthening for the SOP	800	560	240	3%
i) institutional framework of the highway sector	310	217	93	1%
ii) strengthening for the SOP	270	189	81	1%
iii) highway safety	150	105	45	0%
iv) technical assistance for municipal highway management	70	49	21	0%
2. INSTITUTIONAL STRENGTHENING	6,790	4,860	1,930	22%
2.1. Financial Administration and Planning	3,093	2,216	877	10%
i) planning, supervision and evaluation of the PDD	802	561	241	3%
ii) integration of financial administration	459	459	0	1%
iii) strengthening of fiscal oversight and departmental revenue collection	931	652	279	3%
iv) Departmental Information System (SIDEP)	901	544	357	3%
2.2 Management Support Systems	1,769	1,356	413	6%
i) managing the department's documents	594	594	0	2%
ii) updating and valuation of inventories of real property	504	296	208	2%
iii) planning and measuring results, and evaluating performance of personnel	399	275	124	1%
iv) internal auditing	272	191	81	1%
2.3 Technical Assistance for Municipalities	1,928	1,288	640	6%
i) modernization of the CAPs	678	393	285	2%
ii) administrative, fiscal and financial assistance for municipalities	710	493	217	2%
iii) strengthening local and regional land-use planning procedures	540	402	138	2%
3. PROJECT COORDINATING UNIT	620	120	500	2%
Coordinating unit	500	0	500	2%
Mid-term and Final Evaluation	70	70	0	0%
Independent Audit	50	50	0	0%
4. FINANCIAL COSTS	562	217	345	2%
Inspection and Supervision	217	217	0	1%
Credit Fee	345		345	1%
5. CONTINGENCIES	1,158	348	810	4%
TOTAL	31,000	21,700	9,300	100%

100% 70% 30%

#### III. EXECUTION OF THE PROGRAM

#### A. Borrower, guarantor and executing agency

3.1 The Department of Cundinamarca will be the Borrower. The Republic of Colombia will be the Guarantor *in solido* of the loan repayments, including interest and fees, in accordance with the Bank's policy on loan guarantees for subnational entities (Doc. GP-104-2). The Executing Agency will be the government of Cundinamarca, acting through the Project Coordinating Unit (PCU) which will report directly to the Office of the Governor. The Public Works Secretariat will be responsible for the highway subprogram; the institutional strengthening subprogram will be carried out by the Administrative Planning Department, Finance Secretariat, General Secretariat and Personnel Administration Department. The PCU will be responsible for providing administrative, accounting and financial supervision of the program.

#### B. Execution and administration of the project

- 3.2 For the operation of the PCU, a small team of consultants will be engaged to provide coordination, liaison and supervisory services vis-à-vis the various sub-executing agencies participating in the program. These subexecuting agencies will be responsible for carrying out the plan of action developed under each component of the program. The function of the PCU will be limited to duties relating to project administration, and will end upon its completion. The Unit will be headed by a chief who will be responsible for coordination and supervision of the program, and who will be assisted by at least the following: one administrative-financial expert, one specialist in procurement and contracting, one accounting expert and one specialist in planning and evaluation of program execution.
- The PCU will have as its main duties to: (i) provide support for identification and processing of the administrative needs of subexecuting agencies; (ii) prepare budget documents, benchmarks and performance indicators for the activities included in same, in order to demonstrate fulfillment of management objectives; (iii) provide financial and accounting information in accordance with the Bank's requirements; (iv) submit annual financial statements which have been audited in accordance with the Bank's procedures; (v) oversee budgetary and physical execution; (vi) supervise the provision, use maintenance and preservation of goods, equipment and materials; (vii) process requests for disbursements of the loan and present substantiation of eligible expenditures under the program, in accordance with the Bank's procedures; (viii) prepare the annual progress reports on the execution of the program; and (ix) maintain adequate systems for the purpose of: (a) administration and payment of contracts; (b) financial accounting and internal audits; and (c) filing of documents substantiating payment of eligible expenditures.

3.4 The PCU will also be responsible for: (i) consolidation of administrative and financial information prepared by the subexecuting agencies, and subsequent submission of a single statement of accounts; (ii) reviewing and approving terms of reference to ensure that they conform to procedures for procurement of goods and services, and recruitment of consultants for these agencies; and (iii) approval of their requests for reimbursement. Thus, all communications and agreements with the Bank must be handled through the PCU.

### C. Eligibility criteria for highway works projects

- 3.5 The highway subprogram under this operation will be executed using the methodology of the Multiple Works Program since the highway projects to be financed are similar in nature, physically independent of one another and with separate feasibility ratings. The selection criteria for choosing highway works projects to be included in the program are as follows:
  - a. All projects chosen for inclusion in the program must specify works to be carried out on segments of the department's secondary road network.
  - b. These works must be part of the department's highway strategy as laid out in the Departmental Development Plan.
  - c. For inclusion in the program, a project's technical and financial feasibility studies must have been completed using the HDM-IV planning system, and must have received the Bank's approval prior to execution. The project must also have an IRR of greater than 12%.
  - d. To be included here, projects must be for rehabilitation or improvement of highways and must be carried out within the existing right of way. Projects for construction of new stretches of highway will not be accepted in the program.
  - e. All works to be financed will be subject to the social and environmental requirements specified in the environmental and social management system described in paragraph 4.24.
  - f. The final designs for the works must be prepared under contracts whose terms of reference have been approved by the Bank.
  - g. The final design studies for the works must be finished and approved by the Bank before the tender is called. The works must include the required highway safety elements, including all signage and road markings specified in the final designs.
- 3.6 During the preparation phase, 43 projects (accounting for 93% of the amount allocated for works projects) were identified as qualifying for inclusion in this program. Financial, environmental and technical studies have been completed on all

43 of these projects. The final designs for these works have also been completed and reviewed by the Bank.

#### D. Contractual conditions

- 3.7 Annual Work Plans (AWPs). The program will be executed in accordance with annual work plans to be prepared in coordinated fashion by the various sub-executing agencies and then consolidated by the PCU. In the course of the operation, the Borrower must submit an AWP (as defined in the following paragraph) each year, which must be approved by the Bank before the resources allocated for operation can be released. With the Bank's agreement, the Borrower may submit additional AWPs where this will facilitate the supervision and execution of the program. The AWPs for the first year are at an advanced stage of preparation.
- 3.8 The program's activities are organized under an AWP with seven components as follows:
  - a. Annual plan for tenders, contracting and execution of highway works projects under the program, for which the SOP is responsible.
  - b. Plan of action for institutional strengthening in the highway sector, for which the SOP is responsible.
  - c. System for planning, supervision and evaluation of management by objectives, which is under the responsibility of the DAPC.
  - d. **Departmental system for integrated fiscal and financial administration**, which is under the responsibility of the SHD.
  - e. **Departmental Information System**, which is under the responsibility of the General Secretariat.
  - f. **Management Support Systems**, which are under the responsibility of the General Secretariat and the DATH.
  - g. **Technical assistance for municipalities**, the preparation of which will be the responsibility of the DAPC.
- 3.9 The AWPs will contain the timetable and description of activities to be carried out during the year, establish goals and indicators in accordance with the logical framework of the program. It will also include a breakdown for execution of the budget, indicating sources of financing and consistency with the budget of the Department of Cundinamarca. Preliminary terms of reference will also be included for the hiring of individual consultants and consulting firms, and specifications for any tenders that are to be called. The AWPs will also cover the execution,

monitoring and evaluation of environmental management plans (PMAs), in accordance with the proposal for managing the environmental and social aspects of the program.

- 3.10 **Opening of the Special Account.** The Finance Secretariat will arrange to open a Special Account for the purpose of receiving and managing funds received from the Bank's loan account.
- 3.11 Conditions precedent to the first disbursement: prior to the first disbursement, the departmental government must present to the Bank evidence of: (i) the creation of the PCU which will report to the Office of the Governor; (ii) the hiring of the coordinator of the PCU, and selection of the minimum personnel required for the unit's operations (one person responsible for financial administration, and one for procurement and contracts); (iii) the opening of a Special Account for managing the resources from the Bank; and (iv) the Bank's approval of the definitive AWP for the first year of the operation.

#### E. Procurement of goods and services

3.12 The procurement thresholds for requiring international competitive bidding under this program are: US\$350,000 for goods and related services; US\$200,000 for consulting services; and US\$5 million for construction works. These thresholds are justified on the basis of the fact that in similar projects carried out in Colombia, only external bidders submit proposals on amounts above these figures. Procurement of items valued at amounts below these thresholds will be conducted in accordance with the laws of Colombia. Annex II sets out the program's procurement schedule.

#### F. Revolving fund

3.13 To provide for disbursements under the program, a revolving fund of up to 5% of the total loan will be established in accordance with the Bank's procedures. Within 60 days after the close of each six-month period, the PCU must submit a semi-annual report to the Bank describing the status of the revolving fund under its care.

#### G. Recognition of prior expenditures

3.14 The departmental government has requested that the Bank recognize as local counterpart or retroactive financing, prior expenditures made during the 12-month period preceding approval of the loan and incurred for the hiring of consultants and the procurement of goods and related services in furtherance of the components of this program, up to a total of US\$500,000. Provided it can be demonstrated that these expenditures have been made in compliance with procedures substantially analogous to those of the Bank, it is recommended that they be so recognized.

#### H. External Audit

3.15 Annual financial statements on the program will be submitted to the Bank by the Executing Agency throughout the execution period, and must be audited by an accredited accounting firm acceptable to the Bank and in accordance with terms of reference agreed to in advance by the Bank. These statements must be submitted within 120 days following the close of each fiscal year. The firm of auditors shall be selected and hired in conformity with the Bank's procedures (AF-200), and the fee for audits is included within the program's costs and will be financed with resources from the Bank's loan.

#### I. Execution period and disbursement schedule

- 3.16 The period for commitment of resources will be four years and the disbursement period itself will be four and one-half years, reckoned from the date on which this contract enters into force. This timeframe is deemed sufficient for carrying out the proposed technical assistance activities, completing tender procedures, hiring contractors and executing the respective works.
- 3.17 Given the advanced level of preparation for the highway construction works (see paragraph 4.6), a large number of these projects are expected to be executed during the first year of the operation. The institutional strengthening activities will take longer to complete, but most of these will be finished within the first three years of the program. Disbursements under the program will be carried out according to the following table:

Table III-1
Disbursement schedule (US\$ thousands)

Year	IDB	Counterpart	Total	
1	13,100	5,600	18,700	60%
2	6,300	2,800	9,100	29%
3	1,600	600	2,200	7%
4	700	300	1,000	3%
Total	\$21,700	\$9,300	\$31,000	100%
%	70%	30%	100%	

#### J. Monitoring, evaluations and progress reports

#### 1. Mid-term evaluation

3.18 A mid-term evaluation will be carried out using resources from the program. One of the main objectives of this evaluation will be to measure the amount of progress made in highway works projects, most of which will have been completed, and the degree of success with the proposed institutional changes within the departmental

government. Specifically, the report will evaluate: the letting of contracts and execution of highway works; the progress achieved in executing the plan of action for institutional strengthening in the highway sector, including implementation of the SAMR in the initial 1200-km of roads; and advances made in carrying out the AWPs for the respective institutional strengthening subprojects. The emphasis in this evaluation will be on verification of compliance with the goals set in the Logical Framework (Annex I) for each component. The mid-term evaluation will be carried out when 60% of the program's resources have been disbursed, or in any case no later than 24 months after the first disbursement under the program.

#### 2. Final evaluation

3.19 When at least 90% of the resources under this loan have been executed, funds earmarked for this purpose will be used to hire an independent firm to conduct the final evaluation of the program. This evaluation will have as its primary objective to analyze the results achieved by the program, particularly those attained under the institutional strengthening component. The extent to which the proposed goals have been accomplished will be determined, with special emphasis on increases in the level of efficiency among departmental managers, and the transparency and disclosure of results by same; on implementation of the SIDEP, the systems for monitoring and evaluation of the PDD, and the SGFT; and on the impact of technical assistance on the municipalities. These in addition to follow-up on the topics indicated in the mid-term evaluation.

#### 3. Progress reports

3.20 During the execution period, the PCU will present annual informal progress reports to the Bank, including appropriate details on the actions carried out that year and the procedures used in applying resources received under the loan.

#### 4. Ex post evaluation

- 3.21 The project team consulted with the government on the possibility of including funding for an ex post evaluation as part of the program in order to determine whether the development objectives have been achieved. The government stated that it considers this type of evaluation important, but that since obtaining a true picture of the impact of highway projects requires waiting at least three years after completion of the program before conducting such an evaluation, it recommends that financing for this type of study not be included in the program, but that an ex post evaluation be carried out by the Bank using its own resources.
- 3.22 The government undertook to gather the information necessary for the ex post evaluation during execution of the program and suggested that this assessment be carried out three years after completion of same. Using the indicators contained in the logical framework, this evaluation will conduct a qualitative analysis of the

program's impact on transportation costs within the stretches improved under the program, the effect that implementation of the SAMR has had on maintenance of the road network, and the results and sustainability of the institutional strengthening activities carried out. Finally, this evaluation will assess the economic impact of the program by comparing IRR projections with the rate in effect at the time of the ex post evaluation.

#### IV. FEASIBILITY AND RISKS

#### A. Institutional feasibility

- 4.1 Institutional feasibility can be analyzed from two perspectives. On the one hand, the analysis can measure the capacity of an entity to execute the program. And on the other hand, it may assess the sustainability of institutional change once the project has been completed. On the first point, and bearing in mind that the Government of Cundinamarca has had little experience with the Bank and its procedures, it was decided to engage the services of a consultant to evaluate the government's capacity in this respect, using the methodology developed by the ROS.<sup>13</sup> It should be noted that this is the first project in Colombia to make use of this methodology for projects in preparation. The principal conclusion from the study was that "on average, the government's capacity receives a "medium development" rating, which in turn indicates "medium risk" that may be managed with appropriate...". Accordingly, it is recommended that "a component entitled Strengthening of the Internal Audit System be added to the institutional strengthening subprogram en el Subprograma de Fortalecimiento Institucional."14 This recommendation was accepted by the team and made part of the present operation. By financing this component, the government will have the capacity to execute the program in suitable fashion and will be fully cognizant of the Bank's procedures.
- As to the second point, the sustainability of institutional change after the execution stage has ended rests with the strengthening received by key units of the departmental government such as the Finance Secretariat, the DAPC and the SOP. But these entities are being strengthened not only so as to improve that government's management operations, but also to increase their capacity to perform one of their primary duties, namely that of providing technical assistance for the department's municipalities.

#### B. Financial viability

4.3 It can be seen from an analysis of the current budget and projections for following years that the department government is financially viable and has the borrowing capacity to undertake the loans scheduled with the IDB and the World Bank. Table IV-1 presents a summary of the indicators established under Laws 617/00 and 358/97 for measuring financial viability and debt carrying capacity, respectively.

System for Evaluating Institutional Capacity (SECI). The same consultant who assisted the ROS in developing this method was selected to apply it in the present case to Cundinamarca.

<sup>&</sup>lt;sup>14</sup> "Informe de Evaluación de la Capacidad Institucional", Bogota, July 2002, page 6.

4.4 Judging by the indicators established under Law 617/00, Cundinamarca can be seen to be self-sufficient and able to cover expenditures with its own revenues, as well as generate a surplus for investment. Specifically, during fiscal 2001 the government maintained an operating expenditures/current revenues ratio of 61% (below the 65% level defined in the law). With respect to debt carrying capacity, in the following four years it will produce a net substitution of internal for external debt, ending with lower overall indebtedness beginning in 2006. By then the department will have seen rapid amortization of internal debt, reducing payments of capital and interest by nearly half as of 2006. At the same time, its repayment of foreign debt to the multilateral banks, due to begin in 2003, will rise starting in 2005, but by a lesser amount. Thus, during the period 2003-2005 total payments for capital and interest (on both internal and external debt) will rise slightly, then begin falling in 2006. In each of these years, the interest/operational savings and debt balance/current revenues ratios have not exceeded green light limits established by law

Table IV-1
Financial viability and borrowing capacity of Cundinamarca (in %)

<b>v</b>		,				
	2001	2002	2003	2004	2005	2006
Indicator Law 617/00	65	60	55	50	50	50
Operating expenditures/current revenues	61.0	58.62	54.07	50	50	50
Indicators Law 358/97						
Interest/Operational savings (maximum 40%)	20.9	20.6	27.5	25.6	22.0	15.7
Debt balance/Current Revenues (maximum 80%)	28.2	39.0	44.7	41.1	34.2	23.1

4.5 As with all loans undertaken by local administrations, the departmental government's finances were evaluated by the Ministry of Finance and Public Credit's DAF and the Controller General's Office (CGR), both of which approved this operation. For its part, the National Socioeconomic Policy Council (CONPES 3174) agreed to cover "with sovereign guarantees up to a maximum of US\$42 million, or its equivalent in other currencies, loans from multilateral lending agencies which are undertaken by the Department of Cundinamarca in fulfillment of its 2001-2004 investment plan". Of this amount, US\$27 million will cover IDB lending, while the rest will be used for a World Bank loan for improvement of the education sector.

#### C. Technical feasibility

#### 1. Highway Projects

4.6 In determining the technical feasibility of this program the lessons learned from earlier highway projects were taken into account, in particular the need to ensure that engineering designs are of the highest quality and to avoid operations requiring the acquisition of addition land for the works. Given the relatively simple technical

characteristics of the projects to be included, the program should not entail major complications. The final studies and engineering designs will be drawn up by consultants working to terms of reference approved by the Bank. All of the works projects included in the program are required to have completed final designs before going to tender. The Bank has gone over in detail and confirmed the quality of the final engineering designs for 42 of the projects already identified for the program. All projects under this program will be carried out within the existing right of way, so that no addition land purchases will be necessary.

- 4.7 Supervision and oversight for highway projects in Cundinamarca will be provided by SOP officials and works supervisors hired for this purpose. All oversight duties on works projects under the program will be performed by project supervisors recruited through public tenders.
- 4.8 The engineering designs for projects have incorporated highway safety elements such as curbing, line poles, guardrails and impact protection abutments. Priority has been placed on protecting pedestrians and non-motorized traffic. Because of heavy bicycle traffic, two of the projects identified for inclusion in the program (Zipaquira-Nemocon-Suesca and Zipaquira-Cogua) will include construction of bicycle paths paralleling the affected roadways. All project designs include installation of highway signage and road marking, provision for which is made in the construction contracts. Annex III of the present document contains a map showing the locations of the works identified to date. Following is a brief description of their technical characteristics.
- 4.9 **Rehabilitation Projects**. The rehabilitation projects generally consist of a series of activities required to restore the roadway to its original condition so that it meets the technical specifications for which it was designed and built. The basic works involved include restoration of the roadbed and surface (sub-base, base course, wearing surface); patchwork; restoration, improving and construction of drainage, subdrain, stabilization and protection works; and signage. Some projects include bituminous surface coating, and asphalt pavement will be laid on three of them.
- 4.10 **Road Improvement Projects**. Road improvement projects generally include the activities required to restore or upgrade roadways and related drainage and subdrainage works to meet technical, operational and environmental standards, and to provide the required service—based on present and projected level of traffic. Basic activities may include minor realignment and small-scale expansion; grooming of unpaved roads, bituminous surface treatment or applying asphalt pavement; patchwork; reconstruction or building of bridges; restoration, improving and construction of drainage, subdrain, stabilization and protection works; and signage and road marking.
- 4.11 All of the improvement projects involve a package of works designed to bring the structural elements and wearing course (either by asphalt paving or surface

treatment) to a level that will ensure a useful life of 6-10 years for paved highways, and 5 years for unpaved roads. Most will include drainage, sub-drainage and stabilization works, as well as installation of signage and road marking. Some of these projects will include widening of the roadway, but in no case will this exceed the original reserve area established when the road was built, and all projects will maintain the current alignment of affected routes. One improvement project will involve building four concrete bridges with spans of 25-70 m. However, all four bridges can be built without requiring work on the respective waterways.

#### 2. Information systems

4.12 The department has established a method for formulating a strategic information systems plan that will help it to integrate organizational procedures with the needs of each agency, in order to guarantee quality and ensure consistency in the production, processing and use of information. The program will assist in this effort by financing preparation of a training plan which, in addition to meeting general training needs, will also cover the organizational aspects necessary to improve the ability of officials to both formulate their information needs and produce the desired data.

#### D. Economic feasibility

- 4.13 Each of the projects to be included in the program has been subjected to a costbenefit analysis to determine its economic viability. This analysis also enabled the authorities to prioritize the projects and adjust the level of activity required for each one (grooming of unpaved roads, surface treatment or full paving of highways) according to the volume of traffic. Future projects to be included in the program will undergo the same evaluation.
- 4.14 The economic analysis was performed using the HDM-IV model which evaluates savings in the operating costs of vehicles and in travel time. The economic costs determined were corrected using the National Planning Department's shadow price correction factor. Future maintenance costs for the relevant roadway were included in every case. The project were analyzed in complete form, so that in cases with sunk costs, these were included in the economic analysis.
- 4.15 The results of the analysis indicate that of the 43 projects included in the program so far, 13 have an IRR above 12% but less than 20%; 16 have an IRR in the 20%-30% range; and 14 have an internal rate of return greater than 30%.
- 4.16 Projects with an IRR less than 20% underwent sensitivity analysis with costs increased by 20% and zero growth in traffic volume. This analysis demonstrated the strong health of the projects: only 2 produced IRRs less than 12% (10.8% and 7.2%, respectively).

#### E. Environmental and social feasibility

- 4.17 The projects included in the program to date consist primarily of small- to moderate-scale operations. Virtually all are for rehabilitation or improvements to roadways measuring 10 km or less in length, in which the relevant works will be carried out within the original right of way and without varying the route's current alignment.
- 4.18 All 42 of the projects to be included are in possession of completed Environmental Management Plans (PMAs) that have been approved by the environmental authority. The studies were reviewed by the project team and, in general, were judged technically adequate and found to include recommendation of suitable environmental measures.

#### 1. Potential Social and Environmental Impact

- 4.19 The program is expected to produce many, widely distributed socioenvironmental benefits, which will be seen primarily in the economy and quality of life of persons living in the target areas.
- 4.20 The institutional strengthening subprogram, including as it does both support for the SOP's environmental management system and technical assistance for municipalities in land-use planning (including environmental aspects), will produce only positive social and environmental effects.
- 4.21 The highway rehabilitation and improvement projects are planned for consolidated rural and urban areas, and will not degrade natural or environmentally sensitive areas. The type of project envisaged does not entail relocating the inhabitants of affected areas, potential disturbance of archeological sites or cultural heritage, or encroachment of areas occupied by indigenous or Afro-Colombian groups, nor does it call for any changes in land use. Finally, none of the projects identified are on preferred routes for transporting of toxic or hazardous materials.
- 4.22 Potentially adverse social and environmental effects can be described as small to moderate in magnitude, readily identifiable, limited to the area directly affected by the works, of short duration and preventable or controllable by taking appropriate steps.

#### 2. Managing environmental and social aspects

4.23 In order to ensure that the highway development program for the Department of Cundinamarca is self-sustaining, a system for managing the environmental and social aspects of works projects has been proposed which will include specific measures for the following areas: mitigation of impacts; supervision, evaluation and monitoring; and institutional strengthening (See paragraph 2.22). The strategy behind this system was established in a document entitled "Proposal for Managing

Environmental and Social Aspects", which was prepared for the project. Following are the highlights of this system.

#### a. Mitigation of Impacts

- 4.24 The proposed mitigating activities and measures include:
- 4.25 *Preconstruction conferences*. These conferences are to be held before construction works begin and will include everyone involved. The purpose of the meeting will be to review the project timetable and its relationship to the proposed social and environmental measures, and to schedule the relevant environmental inspections. Preconstruction conferences will also be held with the inhabitants of areas directly affected by the work, to describe the project and proposed mitigation measures, and to recruit the local labor needed to carry out the work.
- 4.26 General and Specific Environmental Specification for the Construction, Rehabilitation and Improvement Works. A document with this title has been prepared which includes all of the measures intended to mitigate the construction activities proposed in the completed PMAs. These specifications must be included in the bidding conditions for tenders to carry out the highway projects.
- 4.27 Plan for Compensation and Replacement of Socioeconomic Losses and the Relocation of Low-income Inhabitants Directly Affected. The program will not include the construction of new highways or portions thereof. Nevertheless, in the event that any of the activities required in connection with the works projects were to cause direct damage to rural or urban properties, it is necessary to prepare a contingency plan for evaluating losses and setting out alternative means of compensation and relocation in accordance with the Bank's Policy OP 710.
- 4.28 Environmental Management Plan. Projects which could have a moderate-sized impact on the environment (projects with catchment areas that include potentially fragile environments or legally protected zones that require licensing or a permit for use, extraction or removal of natural resources), and whose environmental studies propose the application of compensatory measures in the event of loss or damage to an environmental resources, are required to prepare a specific Environmental Management Plan (PMA) which must be completed and approved by the SOP's socioenvironmental management group, the competent authorities and the Bank prior to the start of the tendering process for the works. The cost of environmental measures for which the contractor is responsible must be included in the contract for the works project. The cost of those measures whose execution is not attributable to the contractor are to be computed separately and must be included in the budget for the project to be approved by the Bank. Where necessary, agreements for execution of measures intended to mitigate the indirect effects of a project will be signed with national and municipal bodies prior to the start of the

relevant works. The PMA must be made an integral part of the bid documents for such projects.

#### b. Supervision, evaluation and monitoring

- 4.29 Environmental supervision of the projects will be provided by the following: (i) the corresponding *Corporación Autónoma Regional*, which is assigned responsibility under Colombia's environmental laws; (ii) the SOP Supervisor with responsibility for the project; (iii) the Environmental Supervision Office under contract to the SOP; and (iv) an independent environmental auditor who must be hired with resources from the program before the contract is signed for the first package of works.
- 4.30 This operation does not qualify as a social equity enhancing project, as described in the indicative targets mandated by the Bank's Eighth Replenishment (document AB-1704), although by significantly improving the secondary road network, increasing regional interconnectivity, reducing transportation costs in general, and strengthening the fiscal and financial capacity of the department and municipalities, it will have a positive—albeit indirect—effect on opportunities for local development.

#### F. Benefits

- 4.31 The program is expected to produce many generalized benefits which will be seen primarily in the economy and quality of life of persons living in the target areas.
- 4.32 At present, the generally poor state of maintenance of the highway system, together with the frequent interruption of surface transportation in certain areas during the rainy season due to flooding rivers and a lack of bridges, impedes access, prevents timely marketing of agricultural products grown in the department, and increases shipping costs, all of which results in the reduced or lost market potential and higher prices for the consumer. Rehabilitation or improvement of secondary highways of strategic importance will substantially contribute to closer integration of the department's internal road system into the national highway network, making it easier for Cundinamarca's products to reach national and international markets.
- 4.33 The physical and operational improvements made to highways and related infrastructure will reduce transport time and shipping costs and improve quality of life for the people that rely on this system, primarily by ensuring greater and faster access to basic amenities such as health care, education and public security services, as well as to commercial and recreational activities. In addition, the program will help create local employment, both in the works themselves and in the maintenance programs to be carried out through community action councils and municipal associations.

- 4.34 With respect to the institutional framework of the highway sector, the activities of this program will enable the SOP to improve its ability to manage this sector with greater efficiency and effectiveness. The improvements in its information systems and transportation planning tools will better equip the SOP to determine the sector's most important needs, and to select and put in place the most effective policies and strategies for more effective utilization of resources. Implementation of a system for administering routine highway maintenance (SAMR) will greatly increase the efficiency of maintenance service, thus protecting the department's investment in highway infrastructure. The highway safety portion of the program will support the DATTC in its efforts to reduce the department's high accident rates. The measures aimed at strengthening the SOP's environmental management capacity will help to improve the environmental quality in all SOP projects, reducing the adverse effects in future infrastructure programs.
- 4.35 Strengthening the financial planning and administration systems will provide an opportunity for the department government to automate its planning, evaluation and monitoring procedures, create a fully integrated local financial management system and define the structural requirements for establishing a department information system, the managerial module of which will facilitate decision making by the governor and departmental cabinet. This, in combination with the optimization and tighter control of revenues and prevention of tax evasion, will make for more efficient and transparent management, and give the actions taken greater effect.
- 4.36 Strengthening the management support systems will guarantee the preservation of institutional memory, boost the department's finances by ensuring financial statements that reflect the current value of its real property, and create a tool which accurately measures personnel performance and encourages greater productivity. The simultaneous implementation of an internal audit system will ensure greater transparency in the administration of institutional resources and have a positive impact on the performance of the organizational units and their core procedures.
- 4.37 Through technical assistance for the municipalities in the areas of fiscal and financial management, and land use planning, it will be possible to upgrade the capacity of selected municipalities to plan and direct their technical, administrative and financial tasks, enabling them to make more effective and efficient use of the available resources and tools. Finally, they will then be better able to carry out the duties assigned to them under the current regulations, and have a better chance of collecting and receiving the resources needed to increase social spending and improve the quality of life of their citizens.

#### G. Risks

4.38 The short term of office served by the departmental government (three years ending in December 2003) could result in the loss of political support for continuation of the program. However, the Government of Cundinamarca has already begun to

carry out a number of the activities called for in the program, allowing for smooth onset once approval has been obtained and rapid execution of tasks scheduled in the first year. Both the highway development and the institutional strengthening subprograms will finance activities that have received high priority from the department government. High-priority activities such as these tend to transcend changes in administration and should—to a large extent—mitigate this risk. Specifically, the program will reinforce strategic processes (planning, programming and budgeting, fiscal and financial administration, support for municipalities and land-use management) which are essential for any administration that wishes to increase its efficiency.

- 4.39 With respect to the highway works projects to be carried out under the program, the main risks that could arise are:
  - a. Cost overruns in the projects due to low quality in engineering studies and final designs. To lessen this risk, the SOP will prepare --and the Project Team will review and approve—highly detailed model terms of reference for the tendering of contracts for these studies. The final engineering designs for 93% of the highway investment have already been prepared and subjected to exhaustive review by the Project Team.
  - b. Underestimation of the time periods required for execution of the program. Advance preparation of virtually all of the final designs for the program will enable the department to issue early and call for tenders on the works projects.
  - c. Overestimation of financial feasibility owing to lower than expected demand for highway transportation as a result of civil unrest in Colombia. In the last four years there has been a considerable drop in traffic on the secondary road system. The estimates of traffic volume used for the financial feasibility studies are based on figures for the current year, which include this decline. The latest figures obtained from the departmental concessions show that the situation is returning to normal levels of demand, particularly with respect to trucking and public transport both of which have begun to recover. This will lend additional credence to the financial feasibility of all projects.
  - d. Rapid deterioration of affected highways due to ineffective or inadequate routine maintenance. For the last 10 years the department has been unable to provide suitable maintenance for the secondary road system. While there have been budgetary constraints, the main problem has had to do less with a shortage of resources, and more with determining priorities and programming of activities. Creating a maintenance administration system with the capacity to plan activities and evaluate results based on technical criteria will make expenditures on road maintenance go further and help to mitigate this risk. In addition, the critical sections (1200 km) in which all of the projects under this program are located

- will be the first portions of the secondary road system to be covered by the SAMR as part of a pilot project.
- e. Difficulties in the execution and supervision of the works due to civil unrest. The problems affecting public order are considerably less in Cundinamarca than in other regions of the country (see paragraph 1.6). Most of the works projects are located in relatively safe areas (in the center and northwestern part of the department) where the incidence of violence is low or nonexistent. The department has been carrying out highway projects in these areas without difficulty. No additional measures will be necessary beyond the normal precautions.
- 4.40 With respect to the efforts to strengthen the planning, financial administration and information systems, potential risks include:
  - a. Resistance to the reorganization of procedures could be encountered due to reluctance on the part of staff to change routine processes that have been carried out in a given way for many years. Resources have been allocated for training and promotional measures designed to prepare personnel for these changes in the procedures they are used to.
  - b. Possible loss or disruption of information sources during consolidation and conversion to new systems and standards. Back-up procedures will be carried out before introducing the planned technological changes, particularly in the case of data bases containing financial and tax information.
  - c. Implementing an enterprise resource planning system such as that which will form part of FOSIT requires that the organization have a thorough grasp of its administrative procedures. Otherwise, the ERP program would override the institution's own software, causing the system to reject users and resulting in a loss of time and resources. To minimize this risk, the program will include training for the personnel that will deal with ERP, and the development of a strategic systems plan that will identify processes and systems, and organize the elements required for establishing key parameters for the ERP solution.
- 4.41 And with respect to the support which the department will provide for selected municipalities, the following risks could arise:
  - a. Lack of coordination with the Ministry of Finance and Public Credit's Fiscal Support Department (DAF) concerning technical assistance in fiscal and financial management. The DAF is currently helping just two of Cundinamarca's municipalities to renegotiate their deficit with the financial system. To avoid a possible failure in coordination, regular meetings have been held between the DAF and the DAPC since the start of preparations for this operation, and the DAF has both reviewed the terms of reference which will be

used to hire consultants, and offered direct support for specialized officials of the MHYCP.

- b. Absence of political will on the part of the mayors of municipalities to take advantage of the technical assistance component of the program. In order to assess demand for such technical assistance, the departmental government invited all mayors to participate in the program. To date over 50 mayoralty offices have indicated their interest in taking advantage of the assistance offered, and their willingness to co-finance the operation (except for municipalities in the sixth category).
- c. Failure to harmonize local land-use planning and establish the coordination required for creation of a long-term land management system. The fact is that the municipalities' shortfall in available investment resources acts as an incentive for joint action, forcing them to develop joint projects that are in their common interest. In addition, the program will include resources for training and raising awareness of the importance of regional development among municipalities. Finally, the department sits on the Regional Planning Board which was formed to develop a regional strategy based on cooperation among the different agencies responsible for land-use in the region, and to provide direct coordination of land management programs to achieve their social and economic development objectives.

## HIGHWAY DEVELOPMENT AND INSTITUTIONAL STRENGTHENING PROGRAM FOR CUNDINAMARCA (CO-0264) LOGICAL FRAMEWORK

Narrative Summary	Indicators	Means of Verification	Assumptions
Goal  Contribute to the social and economic development of the Department of Cundinamarca, and to the strengthening of its institutions			That the activities, goals and objectives of the PDD are carried out satisfactorily.
Purpose  Reinforce the institutional capacity of the departmental government and its municipalities	Departmental investment and management evaluation, monitoring and planning systems implemented and operating satisfactorily by the end of the program	1.1.1 Final report on the program	a. That armed conflict does not hinder completion of the investment projects set out in the PDD     b. That the department's new administration in 2004 will continue execution of the program
	1.2 The department's municipalities are in compliance with the applicable tax laws by the end of the program (operating costs <50% of current revenues in 2004)	1.2.1 Reports from the Controller General's Office and the MHYCP's Fiscal Support Division	c. That mayoralty offices are receptive and have the capacity to assimilate the technical assistance they receive
	1.3 At least 60% of users indicate their satisfaction with the service rendered by the CAPs by the end of the program	1.3.1 Surveys sent to local authorities	d. Active and satisfactory participation by community
Upgrade highway infrastructure, thereby reducing transportation costs and improving highway safety	2.1 Percentage of highways in good condition by the end of the project (5% to 8%)	2.1.1 Annual reports from the SOP	
inghway saicty	2.2 Transportation costs: per km operating costs of vehicles reduced on improved stretches by 25% (unpaved roads), 36% (TSD and groomed gravel roads) by the end of the program. Effective IRR of projects within 5% of estimated values	2.2.1 Annual reports on HDM-IV	
	2.3 Implementation of the highway safety plan developed under the program. Reduction of fatalities in the secondary road system by X% in 4 years through implementation of the X plan will be determined according to the activities specified in the plan, and the tables of the FDOT	2.3.1 Annual reports on the incidence of traffic accidents from the Departamento de Tránsito y Transporte	

Narrative Summary	Indicators	Means of Verification	Assumptions
Components			
1. Planning, financial administration and information systems	1.1 Development Plan, project pipeline, budgetary resources, progress in (physical and financial) execution and performance indicators, all coordinated in a single system, with officials responsible for same duly trained	1.1.1 Annual progress reports on the program	
	1.2 Design of monitoring and evaluation system completed in 2003 and implemented in 2004	1.2.1 Survey of awareness of advances made under the plan	a. The citizenry is receptive to the promotional campaign
	1.3 Total amount for programs in the PDD audited by SSE and compared to the total amount of programs in the PDD	1.3.1 Reports from the SSE and PDD	
	1.4. District Financial Management System (SGFT) designed and implemented on the SAP in 2003, with budget,	1.4.1 Document evaluating implementation of the SGFT	
	treasury, accounting, collections and debts, purchases and control of fixed assets modules in coordinated operation, and all supervisory officials trained in the use of the system by the end of the program	1.4.2 Annual progress reports on the program	
	1.5 Some 40-60% of potential taxpayers added to the Taxpayer Data Base by the end of 2003, and 100% by completion of	1.5.1 Annual progress reports on the program	
	the program  1.6 Electronic payment system and alternative method for tax consultations and payments (call center) fully installed by the end of 2004	<ul><li>1.5.2 Midterm evaluation</li><li>1.6.1 Annual progress reports on the program</li><li>1.6.2 Midterm evaluation</li></ul>	
	1.7 Strategic planning for information systems updated by the end of 2003	<ul><li>1.7.1 Annual progress reports on the program</li><li>1.7.2 Midterm evaluation</li></ul>	
	1.8 Management module of the SIDEP placed in operation by the end of 2004	<ul> <li>1.8.1 Annual progress reports on the program</li> <li>1.8.2 Technical testing of the SIDEP managerial module, with results duly verified and approved</li> </ul>	
2. Strengthening management support systems	2.1 Administrative act standardizing the rules and legalizing the document administration procedures, formulation of procedural manuals for publication in 2003		
	2.2 At least 80% of the entities at the central level are using and in compliance with the rules and quality standards for the reception, organization, preservation and dissemination of the documents containing the department's institutional memory, by the end of the program		
	2.3 System for appraising the real property inventory designed by the end of 2003 and implemented by the close of 2004	2.3.1 Annual progress reports on the program	

	Narrative Summary		Indicators		Means of Verification	Assumptions
			Inventory updated, titles registered, entry in the municipal cadastre, assessment and other data systematically organized and georeferenced for at least 80% of properties in the department, by the end of the program  New system of performance evaluation in place and being	2.4.1	Annual progress reports on the program  Annual progress reports on the	
		2.0	applied for technical assessment to at least 80% of the department's personnel, by the end of the program	2.5.1	program	
3.	Technical assistance for municipalities in fiscal and financial management and land-use planning	3.1.	Provincial Administrative Centers (CAPs) reinforced with adequate infrastructure including equipment for interconnection with the central administration, and staffed with officials trained in municipal management, by the end of the program.	3.1.1	Annual progress reports on the program	
		3.2	All (100%) of the selected municipalities that are not at present in compliance with the parameters of Law 617/00 will be equipped with the necessary fiscal and financial management tools by the end of the program.		the Controller General's Office Annual reports on budget execution by the municipalities	
			80% of the officials responsible for the Administrative Planning Department have received training to provide the municipalities with technical assistance in the procedures for fiscal, financial, administrative and land-use management, by the end of the program.		Annual progress reports on the program	
		3.4	Assistance provided for at least 3 proposed partial plans formulated under the Municipal Land Management Plans, by the end of the program.	3.4.1	Annual progress reports on the program	
4.	Highways rehabilitated and in operation	4.1	220 km of rehabilitated highways have been approved according to approved final designs based on INVIAS technical specifications and standards, by the end of the program.	4.1.1	Annual inventory reports and reports from the Public Works Secretariat	Sufficient resources are available for highway maintenance
		4.2	Five bridges built according to approved final designs based on INVIAS technical specifications and standards, by the end of the program.		Annual inventory reports and reports from the Public Works Secretariat	b. Prices of inputs for the transport service remain stable
5.	Maintenance administration system successfully implemented	5.1	The SAMR has been implemented on at least 1000 km of the department's highways by the end of the second year of the program.	5.1.1	Periodic and annual reports from the SAMR	
6.	Institutional strengthening for the SOP	<ul><li>6.1</li><li>6.2</li><li>6.3</li></ul>	Ordinances governing the department's secondary road system promulgated in 2004.  Plan for transfer of roads to municipalities established by the end of the second year of the program.  Highway inventory for 1000 km completed according to the specifications of HDM-IV by the end of 2004.	6.2.1	Annual progress reports on the program SOP reports and midterm evaluation SOP reports and midterm evaluation	

Narrative Summary	Indicators	Means of Verification	Assumptions
	<ul> <li>6.4 Five-year highway plan established by the end of 2004, along with the annual investment plan based on the five-year HDM-IV plan.</li> <li>6.5 The Public Works Secretariat's annual environmental management manual prepared and implemented by the end of 2004.</li> <li>6.6 By the end of the program, 30% of personnel have received</li> </ul>	<ul><li>6.4.1 SOP reports and midterm evaluation</li><li>6.5.1 Midterm evaluation</li><li>6.6.1 Final evaluation</li></ul>	
	training in planning, 50% in engineering, 50% in information technology, 30% in environmental management, and 50% in quality control.	0.0.1 Final evaluation	
Activities	Budget		
Reinforcement of planning, financial administration and information systems Training in the design and use of indicators; automation of the project pipeline; provision of equipment and information systems for monitoring and disclosure of management performance and results achieved by the department	Reinforcement of planning, financial administration and information systems: US\$3,090,000  1. Planning, monitoring and evaluation of the PDD: US\$802,000		
Design and implementation of the District Financial Management System (SGFT) Design and commissioning of a tax evasion system Formulation and implementation of the SIDEP	<ol> <li>Integration of financial administration: US\$459,000</li> <li>Strengthening of audit authority: US\$931,000</li> <li>Creation of the SIDEP: US\$898,000</li> </ol>		
Strengthening management support systems	Strengthening management support systems: US\$1.6 million		
Standardization of archival procedures; training of officials; computerization of processing; digitalization and distribution of documents.	1. Managing the department's documents: US\$596,000		
Updating and georeferencing of cadastral records; clearing of titles; carrying out appraisal; and organizing and classification of property information.	Updating and valuation of real property inventories:     US\$504,000		
Diagnostic study of current evaluation system; training and assessment of evaluators; and design and implementation of a performance information system.	3. Planning, measurement of results and evaluation of personnel performance: US\$398,000		

Narrative Summary	Indicators	Means of Verification	Assumptions
Technical assistance for municipalities in fiscal, financial and land management	Technical assistance for municipalities in fiscal, financial and land management: US\$ 1.6 million		
<ul> <li>(i) evaluate the capacity of each CAP to meet the requirements of municipalities;</li> <li>(ii) draw up the organizational development plan; and</li> <li>(iii) modernize the technical and operational capacity of the CAPs.</li> </ul>	1. Modernization of the CAPs: US\$690,000		
<ul> <li>(i) assess the current financial situation of local administrations;</li> <li>(ii) improve their administrative, financial and budgetary conditions;</li> <li>(iii) recommend ways for complying with current fiscal regulations;</li> <li>(iv) train local officials; and</li> <li>(v) implement information systems.</li> </ul>	Administrative, fiscal and financial assistance for the municipalities: US\$710,000		
<ul> <li>(i) design methods for coordinating local land management proposals;</li> <li>(ii) hold workshops for training local officials;</li> <li>(iii) provide support for preparation and implementation of partial plans; and</li> <li>(iv) design the regional mapping platform.</li> </ul>	3. Reinforcement of the land management process: local and regional: US\$540,000		
Selection and contracting of construction projects (highways and 5 bridges)	Funding for highway projects: US\$20,370,000	The program document	A. There are firms eligible to bid on construction projects
Selection and contracting of a consultant for development and implementation of the SAMR	Contracting of the SAMR consultant: US\$700,000		B. Timely availability of resources for local counterpart contributions

Narrative Summary	Indicators	Means of Verification	Assumptions
Institutional strengthening for the highway sector  Implementation of highway planning tools (HDM-IV), strengthening of environmental management, of highway safety programs. Training for SOP personnel in specific subjects, and purchase of computer equipment for highway management programs.  Prepare posters describing the scope of routine maintenance activities, establish an appropriate system for awarding of contracts, and define performance indicators for use in evaluation and monitoring of maintenance contracts			C. Peaceful conditions permit works to proceed according to plan.  D. There are consulting firms eligible to bid on contracts for conducting studies, overseeing projects and providing training.  E. There are suitable suppliers to provide the equipment.  F. Trained personnel remain in their positions.  G. Approval of the definition of what constitutes a secondary road system.

										METHOD OF
ACTIVITY	Estimated Value	Source of financing		YEA	AR 1	YEAR 2	YEAR 3	YEAR 4	CATEGORY	CONTRACTING
CONTRACTS	DOLLARS	IDB	COUNTERPART Funding	1st HALF	2nd HALF					
FUNDING FOR HIGHWAY IMPROVEMENT										
Investment and Supervision	20,370,000	14,259,000	6,111,000	×	x	х	х	x	Construction	12 Packages < US\$5 million Competitive Bidding
TOTAL	20,370,000	14,259,000	6,111,000	x	х	х	х	х	Construction	12 Packages < US\$5 million Competitive Bidding
System for Administration and Supervision of Maintenanc	е									
System for Administration and Supervision of Maintenance	700,000	490,000	210,000	x	x				Consulting services	Internat. Competitive Biddin
TOTAL	700,000	490,000	210,000	х	Х				Consulting services	Internat. Competitive Biddin
Institutional Strengthening				х	х	х				
1.1. Strengthening of the institutional framework										
1.1.1. Establish information center	10,000	7,000	3,000	x					Consulting services	Call for bids
1.1.2. Define the Secondary Road System using GIS	270,000	189,000	81,000	x					Consulting services	Internat. Competitive Biddin
1.1.3. Sources of financing for road investment	20,000	14,000	6,000	x	İ	I			Consulting services	Call for bids
1.2. Inter-institutional Coordination	150,000	<b></b>								Said IOI DIGS
1.2.1. Highway Safety Improvements	150,000	105,000	45,000						Consulting services	
1.3. Strengthening of the SOP				×					Consulting services	Local Competitive Bidding
1.3.1. Strengthening of planning tools	80,000	56,000	24,000							
1.3.2. Strengthening environmental management	45,000	31,500	13,500	×					Consulting services	Call for bids
			***************************************	×					Consulting services	Call for bids
1.3.3. Training	40,000	28,000	12,000	х	х				Consulting services	Call for bids
1.3.4. Supervision of contracts	10,000	7,000	3,000	-	х				Consulting services	Call for bids
1.4. Support for municipality				_						
1.4.1. Managing maintenance services	70,000	49,000	21,000		х				Consulting services	Call for bids
				_						
2. EQUIPMENT					ļ					
2.1. Strengthening of the institutional environment										
2.1.1. Define the Secondary Road System using GIS	10,000	7,000	3,000	×					Equipment and goods	Call for bids
2.2. Strengthening of the SOP										
2.2.1. Renewal of equipment	60,000	42,000	18,000	×					Equipment and goods	Call for bids
3. PROGRAMS				- <del> </del>						
3.1. Strengthening of the SOP				-						
3.1.1. Supervision of contracts	10,000	7,000	3,000							
3.1.2. Renewal of equipment	25.000	17,500	7,500	-	X				Equipment and goods	Call for bids
TOTAL	800,000	560,000	240,000	+	Х				Equipment and goods	Call for bids
SYSTEM FOR MONITORING AND EVALUATION OF THE DEPARTAMENTAL DEVELOPMENT PLAN										
ANALYSIS OF KEY PARAMETER REQUIREMENTS FOR THE ERP	17,241		17,241						Consulting services	Call for bids
PS MODULE KEY PARAMETERS DEVELOPED FOR THE ERP	35,000	8,103	26,897	×					Consulting services	Call for bids
FAMILIARIZING USERS WITH THE PS MODULE	17,241	12,069	5,172	х	Ī				Consulting services	Call for bids
TRANSFER OF TECHNOLOGY	10,345	7,242	3,104	<u> </u>	x				Equipment and goods	Call for bids
PURCHASE OF LICENSES	150,000	133,466	16,534		х				Equipment and goods	Call for bids
IMPLEMENTATION	24,138	16,897	7,241		х				Consulting services	Call for bids
SIZING OF THE DATA PROCESSING CENTER	6,897	4,828	2,069	1						
SYSTEMATIZING OF CONTRACT INFORMATION FOR PURPOSES OF	60,000	42,000	18,000	X	ļ		ļ		Equipment and goods	Call for bids
SUPERVISION TRAINING IN FORMULATION OF ACTION PLANS, DESIGN AND USE OF		,		X	ļ		<b></b>	l		
NDICATORS, FORMULATION, EVALUATION AND SUPERVISION OF PROJECTS	20,690	14,483	6,207	1	I	1	1	1		I

ACTRITY	Fatimate 4 V-1	Sauras at Sauras		v-	AD 1	VEAD	VEAD	VEAD :	CATECORY	METHOD OF
ACTIVITY	∟stimated Value	Source of financing		YEA	AR 1	YEAR 2	YEAR 3	YEAR 4	CATEGORY	CONTRACTIN
CONTRACTS	DOLLARS	IDB	COUNTERPART FUNDING	1st HALF	2nd HALF					
PURCHASE OF EQUIPMENT	41,825	29,278	12,548	х	1				Equipment and goods	Call for bids
ANALYSIS OF KEY PARAMETER REQUIREMENTS	8,621	6,035	2,586	х					Consulting services	Call for bids
KEY PARAMETERS SYSTEM	12,069	8,448	3,621	х					Consulting services	Call for bids
FAMILIARIZING USERS WITH THE GIS MODULE FOR SAP	6,000	4,200	1,800	х					Consulting services	Call for bids
PURCHASE OF LICENSES	44,780	31,346	13,434	х					Equipment and goods	Call for bids
MPLEMENTATION	8,621	6,035	2,586	X	†				Consulting services	Call for bids
DESIGN AND IMPLEMENTATION OF THE MASTER DATA RECORDS SYSTEM FOR MONITORING AND EVALUATION OF MANAGEMENT	318,620	223,034	95,586	X						Call for bids
DEFINING STRATEGIES AND MEANS OF RELEASING, PUBLISHING AND DISSEMINATING RESULTS	20,000	14,000	6,000	×					Consulting services  Consulting services	Call for bids
TOTAL	802,087	561,461	240,626						oonouting services	Odil for blab
PROJECT FOR MODERNIZATION OF THE DEPARTMENTAL FINANCIAL INFORMATION SYSTEM					×	×			Consulting services	Call for bids
PURCHASE OF COMPUTER HARDWARE AND EXPANSION OF THE DATA	144,716	101,301	43,415		<u> </u>					
PURCHASE OF SPECIALIZED SOFTWARE LICENSES (Oracle) AND TECHNICAL	159,900	111,930	47,970							
SUPPORT VALIDATION AND UPDATING OF EXISTING INFORMATION IN THE FINANCIAL		,	,	ļ	ļ	ļ				<u> </u>
INFORMATION AT BASE (Quality Control) AND SUPPORT FOR THE SYSTEMS AREA  DETERMININGREQUIREMENTS, ESTABLISHING THE PLAN FOR MIGRATIONOF	25,385	17,770	7,616		×				Consulting services	Call for bids
DATA TO THE SIFT INFORMATION SYSTEM, DETERMINING COSTS AND DECIDING THE NUMBER OF STAFF NEEDED TO IMPLEMENT THE NEW SYSTEM IN SUPPORT OF THE FINANCE SECRETARIAT	48,000	33,600	14,400		×	x			Consulting services	Call for bids
DEVELOPING A WEB PORTAL FOR THE FINANCE SECRETARIAT	80,769	56,538	24,231			X			Consulting services	Call for bids
TAXPAYER MODULE	315,385	220,769	94,615		<b>†</b>					Call for bids
MPLEMENTATION OF STRATEGIES TO OPTIMIZE TAX OPERATIONS.	38,462	26,923	11,538		<b> </b>	X	<b>†</b>		Consulting services	Cell TOF DIOS
STATISTICS ON EVASION, TAX AVOIDANCE AND SMUGGLING	192,308	134,615	57,692			×			Consulting services  Consulting services	Call for bids  Call for bids
FORMULATION AND IMPLEMENTATION OF THE COMPREHENSIVE TAXPAYER	384,616	269,231	115,385							
SERVICE STRATEGY TOTAL	1,389,539	369,600	158,400			X	X	X	Consulting services	Call for bids
DEPARTAMENTAL INFORMATION SYSTEM (SIDEP)										
DEVELOPMENT OF A STRATEGIC PLAN FOR INFORMATION SYSTEMS	126,328	76,233	50,096	х	х				Consulting services	Call for bids
DETAILED DESIGN FOR TRANSACTIONAL SYSTEMS AND THE SIDEP	115,270	69,560	45,710		х	х			Consulting services	Call for bids
MPLEMENTATION OF THE SIDEP	361,821	218,340	143,481	ı		x	х	х	Consulting services	International Competiti
ACQUISITION OF DATA SERVER	38,502	23,234	15,268		х				Equipment and goods	Call for bids
PURCHASE OF LICENSES TRAINING	160,426 98,600	96,809 59,500	63,617	}	X				Equipment and goods	Local Competitive E
TOTALS	900,947	543,676	357,272		<b></b>	·				
MANAGING THE DEPARTMENT'S DOCUMENTS		0.0,0.0	001,212							
ANALYSIS, STANDARDIZATION, DEVELOPING METHODS FOR THE CORRESPONDENCE MANAGEMENT SYSTEM, SUPERVISION DURING MPLEMENTATION, EVALUATION AND MONITORING										
SYSTEMS SOFTWARE LICENSES FOR DOCUMENT MANAGEMENT, AND	39,420	23,788	15,632	X	X	<u> </u>			Consulting services	Call for bids
MPLEMENTATION OF THE CORRESPONDENCE MANAGEMENT SYSTEM	191,458	115,535	75,923		х	<u> </u>			Equipment and goods	Call for bids
MANAGEMENT FILES AND CENTRAL ARCHIVES	333,720	201,383	132,337			х			Consulting services	International Competitiv
ASSISTANCE FOR DECENTRALIZED ENTITIES	29,200	17,620	11,579		<u></u>	ļ	х		Consulting services	Call for bids
TOTALS	593,798	358,326	235,472		<u></u>	ļ				
APPRAISAL OF REAL PROPERTIES										
PILOT PROJECT	94.000	00.400		×	<del> </del>	<b>_</b>			Conculting	
GEOREFERENCING IN ARCINFO AND INTERFACE WITH SAP'S MM	34,863 432,387	20,499	14,363		×	×			Consulting services  Consulting services	
KEY PARAMETERS FOR THE INVENTORY MODULE OF THE SAP'S MM	35,000	20,580	14,420	<u> </u>	×	x			Consulting services	Local Competitive E
UPDATING OF ARVIEW LICENSES	1,400	823	577	X					Equipment and goods	
TOTALS	503,650	296,146	207,504		<u></u>	ļ				
EVALUATION OF PERFORMANCE										
PROGRESS MADE IN THE FIRST STAGE: DIAGNOSTIC STUDY	89,000	55,000	34,000	X	х				Consulting services	
	199,000	109,000	90,000		х	x			Consulting services	
PROGRESS IN THE SECOND STAGE: TRAINING FOR INCREASED CAPACITY AND SKILLS		100,000	55,000	t	† <u>`</u> `	<del>  ``</del>	1	1		1
AND SKILLS STAGE THREE: CREATION AND APPLICATION OF A PERFORMANCE						4.5			0	
AND SKILLS STAGE THREE: CREATION AND APPLICATION OF A PERFORMANCE EVALUATION TOOL	21,000	21,000				х			Consulting services	
AND SKILLS STAGE THREE: CREATION AND APPLICATION OF A PERFORMANCE		21,000 40,000				X			Consulting services  Consulting services	

Highway Deve			engthening Progra		or Cı	undinam	narca (C	O-0264)		
ACTIVITY	Estimated Value	Source of financing		YEA	AR 1	YEAR 2	YEAR 3	YEAR 4	CATEGORY	METHOD OF CONTRACTING
contracts	DOLLARS	IDB	COUNTERPART FUNDING	1st HALF	2nd HALF					
INTERNAL AUDITS										
Analysis, Redesign and Implementation of the SCI	105,000	73,500	31,500	х	х				Consulting services	
Training for personnel in the SCI     Analysis, Redesign and Implementation of the internal control function (Internal	20,000	14,000	6,000		х				Consulting services	
Auditing)	45,000	31,500	13,500		Х		Х		Consulting services	
Acquisition or Adaptation of Technology for Internal Audit Functions	50,000	35,000	15,000		X				Equipment and goods	
5. Training for Officials in the Internal Audit Office	19,000	13,500	5,500	<u> </u>		х			Consulting services	
6. Evaluation and Testing of the SCI	33,000	23,100	9,900		<u> </u>		Х		Consulting services	
TOTALS	272,000	190,600	81,400							
STRENGTHENING FOR THE CAPS										
TRAININGTO UPGRADE TECHNICAL SKILLS AND OPERATING PROCEDURES OF THE CAPS	106,000	77,586	28,414	х	х				Consulting services	Call for bids
IMPROVEMENTS TO PHYSICAL INFRASTRUCTURE	60,000	60,000		х					works	Invitation
DEVELOPMENT OF INFORMATION SYSTEMS AND VIRTUAL NETWORKS	402,500	207,328	195,172	х	х				Equipment and goods	Call for bids
PROVISION OF EQUIPMENT	109,501	48,476	61,025	х					Equipment and goods	Call for bids
TOTALS	678,001	393,390	284,611							
FISCAL AND FINANCIAL ASSISTANCE										
ADVICE AND TECHNICAL ASSISTANCE FOR MODERNIZINGINSTITUTIONSAND STRENGTHENING PUBLIC FINANCE OPERATIONS OF MUNICIPALITIES	348,000	239,465	105,535	х	x	x			Consulting services	
PURCHASE OF EQUIPMENT AND LICENSES	262,000	183,400	78,600	х					Equipment and goods	Call for bids
TRAINING	100,000	70,000	30,000		×	х			Consulting services	Call for bids
TOTALS	710,000	492,865	214,135							
STRENGTHENING FOR THE LOCAL AND REGIONAL LAND MANAGEMENT PROCESS										
Training for departmental and municipal officials in zoning, property increment systems, partial plans, GIS, monitoring and updating the PO1	70,345	0	70,345	х	х	х			Consulting services	Call for bids
Coordinating local land management plans (POTs)	151,614	132,304	19,310	х	Ī				Consulting services	Call for bids
Management instruments: preparation and implementation of partial plans (Soacha y Girardot)	202,115	153,970	48,145	Х	Х				Consulting services	Call for bids
GIS (Design the mapping platform for regional operations)	115,927	115,927	0		Х				Consulting services	Call for bids
TOTALS	540,001	402,201	137,800							
GRAND TOTAL	27,856,935	18,630,804	8,361,593							

# PROGRAMA DE DESARROLLO VIAL Y DE FORTALECIMIENTO INSTITUCIONAL DE CUNDINAMARCA

**OBRAS VIALES PROPUESTAS** 

(CO-0264)

